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City of Fortuna GENERAL PLAN

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CITY OF FORTUNA

GENERAL PLAN

Approved by the Planning Commission on May 25, 1976

Adopted by the City Council on July 6, 1976

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CONSULTING ENGINEERS

A Corporation

JOHN R. WINZLER - CE 9878
ROBERT F. KELLY - CE 11005
RONNIE N. CLIFFORD - CE 14071

633 THIRD STREET • P.O. BOX 1345 • EUREKA, CALIFORNIA 95501 • PHONE (707) 443-8326

20 September 1976

To the Honorable City Council
City of Fortuna

Council Members:

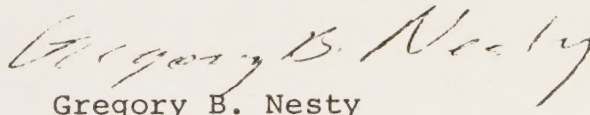
We are pleased to forward the Fortuna General Plan, which brings together in one document all of the General Plan elements required to be prepared and adopted by provisions of California law.

We wish to acknowledge the contributions of others to this planning effort. Mr. Matt Morris of the Five Cities Circuit Riding Team was responsible for preparation of the Land Use Map. Oscar Larson and Associates of Eureka prepared the recommendations on public safety that were incorporated into this General Plan as a study element. Finally, Mr. Tom McWhorter, City Administrator, and the members of the Fortuna Planning Commission contributed actively during the many study sessions that were necessary to tailor this document to the needs of the City. It has been a pleasure to work with these people and the City Council during the planning program.

We are confident that your actions to implement the Plan policies will prove beneficial to the citizens of Fortuna in future years.

Respectfully submitted,

WINZLER AND KELLY

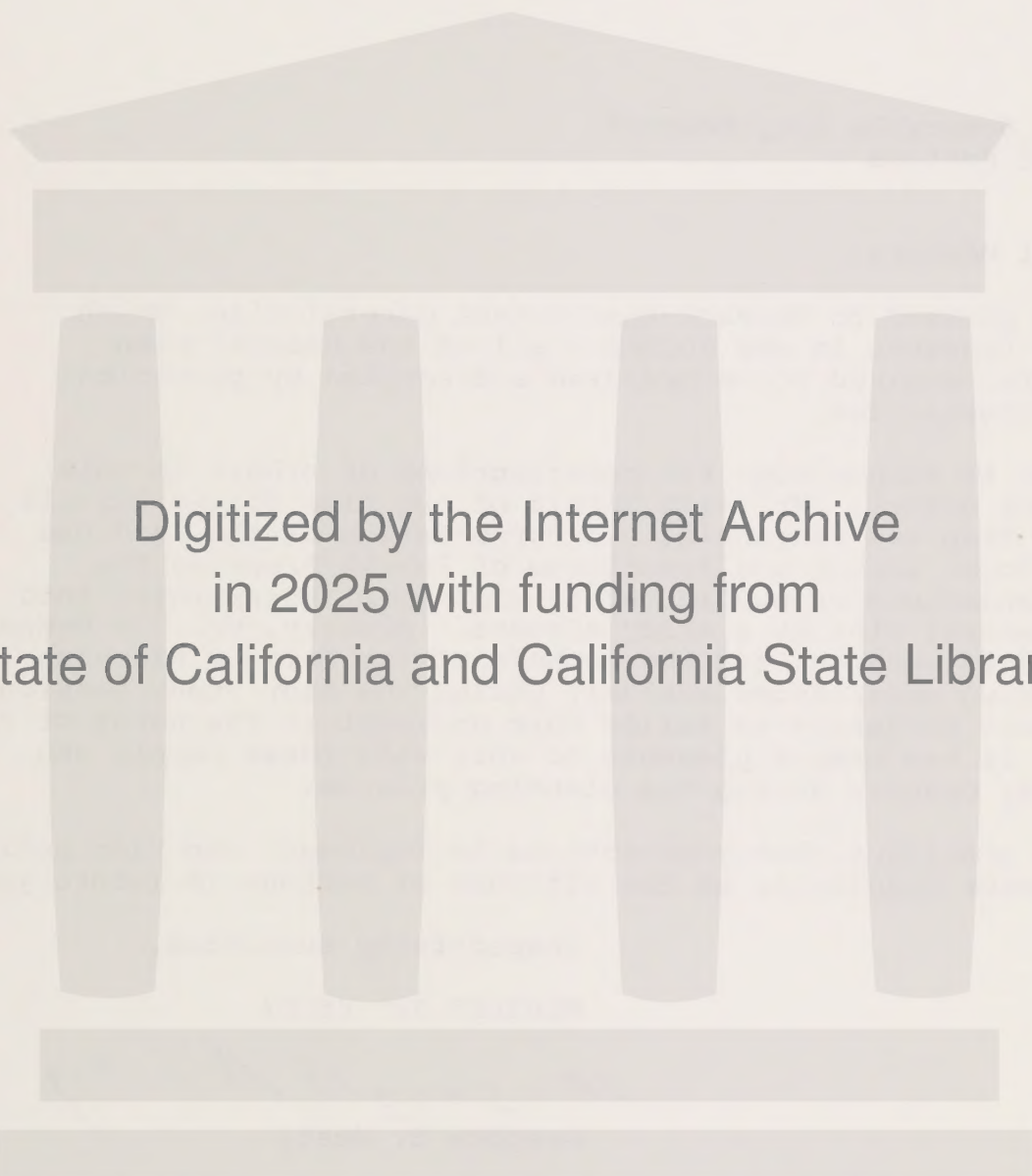


Gregory B. Nesty

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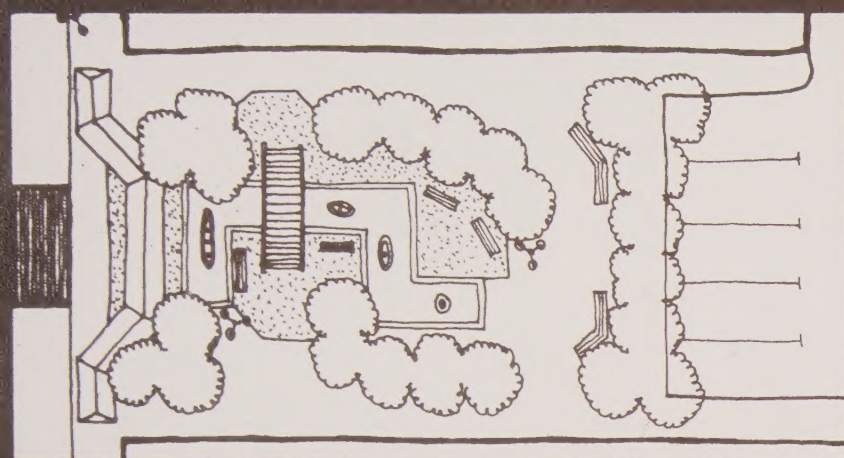


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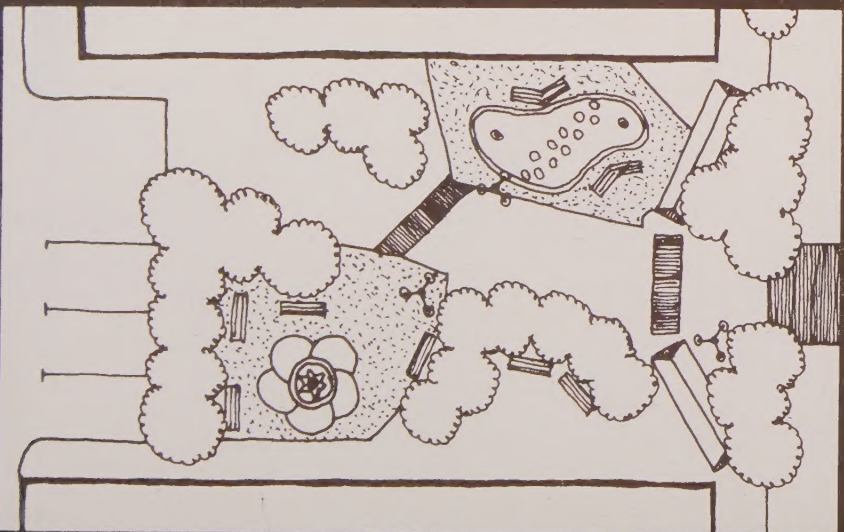


INTRODUCTION

Fortuna is a friendly, small community located in a beautiful setting within Humboldt County, California. Fortuna, as are an increasing number of small cities in America, is concerned about its future and the role its Central Business District will play in the decade of the 1970's. In recognition of the need to look to the future and dynamically move forward with imaginative but realistic development projects, the Fortuna Chamber of Commerce's Downtown Development Committee respectfully presents this plan as a guide for the rejuvenation of the "heart" of the City.

The success of any effort to upgrade the "core area" of the City requires enthusiastic support and cooperation of the public and private sectors of Fortuna. This program is a joint effort, with the basic goal of providing the citizens of the community with a strong, pleasing, well functioning and diversified downtown.

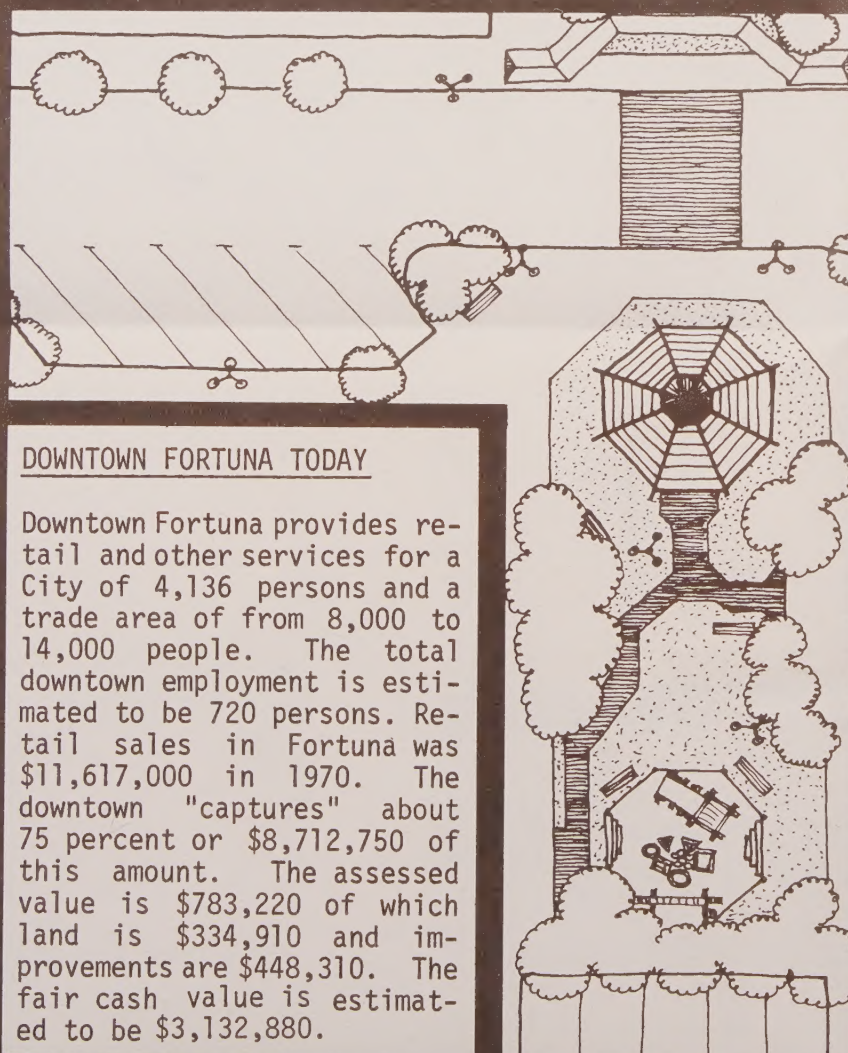
The need for a farsighted, aggressive, venturesome and organized group of downtown businessmen is paramount. It is this group which will be the catalyst to eventually accomplish those projects so necessary to maximize downtown's position as the social, cultural, business and administrative center of its trade area. Citizen participation and support is essential.



GOALS AND OBJECTIVES

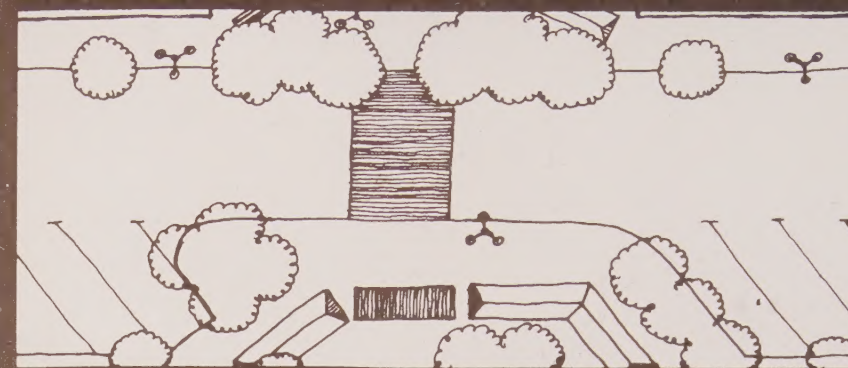
For the core area of Fortuna to become an attractive, efficient and effective portion of the City, it must achieve these principal aspirations:

- Provide convenient, inexpensive and adequate parking for customers and employees.
- Reduce unnecessary vehicular traffic, thus reducing conflict between pedestrian and automobile.
- Improve the appearance of stores, signs, streets, sidewalks, utilities, and the overall downtown area.
- Strengthen the competitive position of downtown.
- Improve the identify, image and prestige of downtown.
- Maximize customer accessibility to downtown.
- Develop a coherent and consolidated downtown.
- Establish a staged implementation program to include a financially feasible approach.
- Obtain business, public and citizen support for improving downtown. Eliminate and avoid incompatible land-use relationships.



DOWNTOWN FORTUNA TODAY

Downtown Fortuna provides retail and other services for a City of 4,136 persons and a trade area of from 8,000 to 14,000 people. The total downtown employment is estimated to be 720 persons. Retail sales in Fortuna was \$11,617,000 in 1970. The downtown "captures" about 75 percent or \$8,712,750 of this amount. The assessed value is \$783,220 of which land is \$334,910 and improvements are \$448,310. The fair cash value is estimated to be \$3,132,880.



1980 PROJECTIONS

To provide a realistic framework for the preparation of a Downtown Development Plan, future growth of the area must be estimated for a reasonable time period. The projections to the year 1980 provide this framework.

During fiscal years 1967-1968 thru 1968-1969, retail sales for the core area increased approximately \$753,000 per year. Projection of this figure to 1980 results in a \$7,530,000 increase for a total 1980 retail sales figure of \$20,380,000. This figure makes no allowance for inflationary trends, nor should it be considered a detailed review of the overall economic health of Fortuna. If the downtown area accounts for 75 percent of this projection, it would "capture" \$15,285,000.

Present downtown employment is estimated to be 720 persons. Based on this figure, the average sales per employee would be \$13,422. Assuming this figure remains consistent, and based on the projected 1980 downtown sales, employment in 1980 should be nearly 1,140 persons.

Existing downtown retail space is estimated to be 532,300 square feet. With 720 present employees, retail space per employee is 740 square feet. Retail space in 1980, based on 1,140 employees is estimated to be 844,000 square feet, or an increase of 311,700 square feet. It is estimated that "absorption" by existing businesses will reduce this demand by 50 percent. It is also assumed that new development will be in multi-level structures; therefore, the ground coverage for new development will be 77,925 square feet, or 1.80 acres.

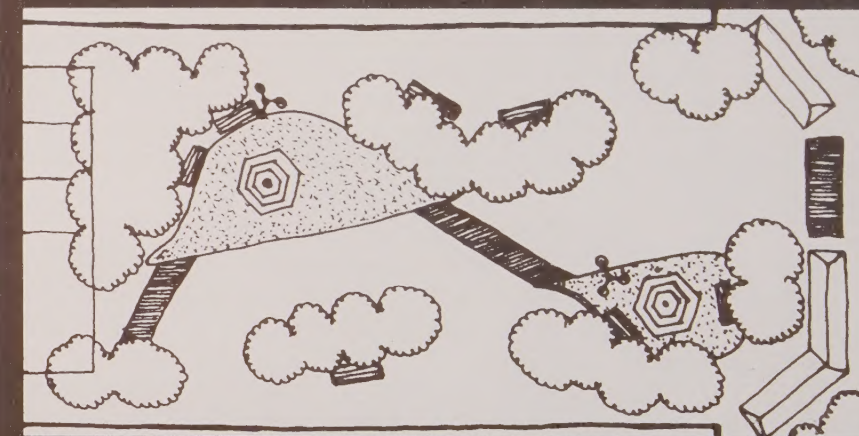
Based on present land-use activities and size of the downtown, there is a shortage of 982 off-street parking spaces, or 6.8 acres. By 1980, with an increase of 155,850 square feet of new retail space, 520 off-street spaces, or 3.5 acres will be needed.

Fortuna's population, between 1960 and 1970, increased by 613 persons, an average of 1.7 percent per year. By 1980, Fortuna's population is estimated to be 4,800 persons. Based on its past growth record, the downtown trade area population, by 1980, is estimated to be between 9,600 and 15,000 persons.

FORTUNA DOWNTOWN DEVELOPMENT PLAN

The Downtown Fortuna Development Plan is graphically depicted on the reverse side of this summary report. The principal features of this bold and dynamic program are as follows:

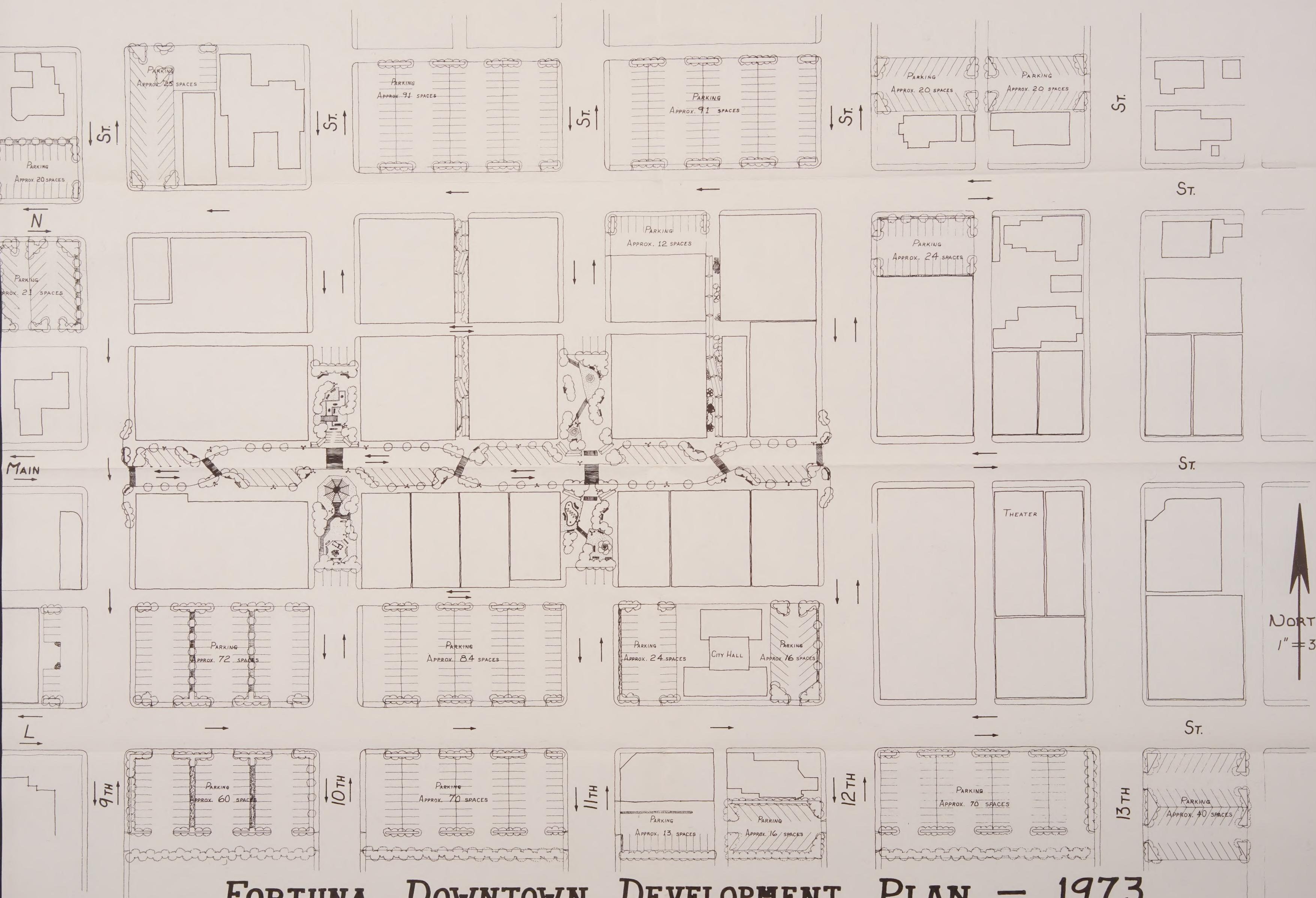
- Develop a semi-mall along the "heart" of Main Street.
- Construct pedestrian plazas at Tenth and Eleventh Streets.
- Present parking will be consolidated with an emphasis on well distributed and convenient peripheral parking lots.
- Approximately 490 new parking spaces serving downtown would be developed.
- A one-way vehicular traffic system for Ninth, "L" and "N" Streets. This will facilitate traffic flow and assist in creating a pleasing downtown shopping environment.
- Establish weather protected pedestrian traffic system.



The semi-mall on Main Street would retain, at a reduced level, present on-street parking facilities. Traffic speeds would be reduced by design. Large commercial trucks would be discouraged from using Main Street. The plazas on Tenth Street, Eleventh Street, and along Main Street would provide a pedestrian environment in which car-truck traffic would play a sharply reduced role. A better overall shopping atmosphere would be created. The development of a uniform weather protected cover for the sidewalk areas and a uniform color and sign theme will assist in creating this atmosphere.

The development cost of the plan is estimated to be about \$750,000, exclusive of financing costs. The funds, it is expected, would come from both public and private sectors of the community. The precise funding by these sectors will have to be determined through future discussions.

Should you have any questions concerning the Downtown Development Plan, do not hesitate to contact the Fortuna Chamber of Commerce.



FORTUNA DOWNTOWN DEVELOPMENT PLAN - 1973

FORTUNA
DOWNTOWN
DEVELOPMENT
COMMITTEE

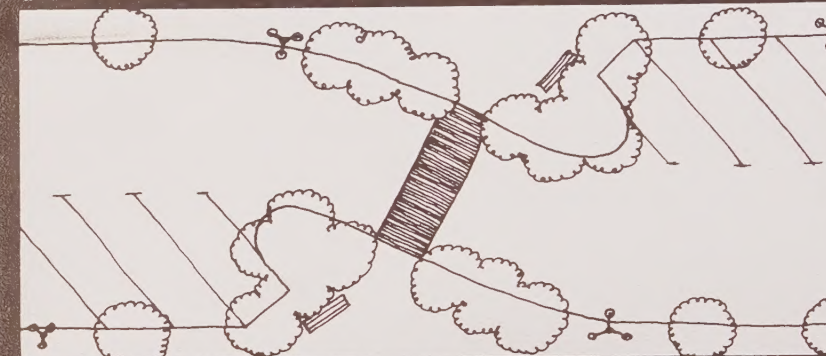
DOWNTOWN DEVELOPMENT COMMITTEE
FORTUNA CHAMBER OF COMMERCE

Larry Francesconi, Chairman

James Anderson
Roger Low
Herman Bistrin
Tom McWhorter
Steve Granville
Jim Loudon

Bill Keener
Ben McWhorter
Larry Eddy
Jim Delaney
Larry Foster

FORTUNA CHAMBER OF COMMERCE
936 Main Street
Fortuna, California 95540



TO: _____

INTRODUCTION

The General Plan contains a statement of community goals and policies for the community to follow in order to achieve these goals. The objectives relate to the community's renewal and future development. General Plan preparation provides an opportunity for the community to review its resources, to recognize its problems, and to seek solutions to them.

Local government should be involved in the physical and social development of the community. Local government's activities should result in better living conditions for its residents. Local government can, through its influence, affect local economic conditions and individual attitudes toward the community. Local government is constantly being pulled in different directions by various special interest groups, but its responsibility is to pursue policies that will result in a better life for all of its constituents. The General Plan allows local governments and citizens to look at their community in a perspective that is as objective as possible. This unique perspective results from several characteristics of the General Plan:

1. The plan is comprehensive in that it considers all the elements that affect the physical and economic development of the community.
2. The plan is general in that it suggests broad policies for community development that can be applied by the city government to specific issues at a later date.
3. The plan is long range since it is based on forecasts for 20 or more years, although it may address short range problems also.
4. The plan is flexible since it allows for changes in light of new developments or conditions. A complete review should be made at least once every five years.

FUNCTIONS OF GENERAL PLAN

1. Policy Determination - An adopted General Plan represents the development policy of the City. It is the constitution for land use within the jurisdiction.

2. Policy Effectuation - The General Plan assists the City Council in making decisions on specific problems and proposals based on a comprehensive set of long range policies developed in the General Plan.

3. Communication - The General Plan permits persons and agencies engaged in development to view the City Council's long range policy, and thus avoid preliminary expenditures on projects that are not likely to be approved.

PLAN IMPLEMENTATION

The methods available for implementation of this plan include the following:

Codes

Zoning and Subdivision Ordinances

} and changes

Acquisition of Real Estate for City Purposes
and Capital Improvements Planning

Public/Private Partnership

Coordination with Other Government Agencies

Planning and Studies

The methods listed above may be utilized to implement the City of Fortuna's General Plan. Implementation measures shall be conducted consistent with the General Plan, or its amendments after their adoption, as required by law.

OBSTACLES TO IMPLEMENTATION

1. Intergovernmental Conflict - As is the case in all growing cities, Fortuna's boundaries are constantly changing. Effective land use controls, capital improvements, and review of subdivision design may be exercised by several jurisdictions during the life of the plan. The County of Humboldt will exercise control over much of the area considered in the General Plan. The cooperation of the county level agencies such as the Planning Commission, LAFCO, and the County Planning Department is not only desirable, but

necessary if the overall goals are to be achieved.

2. Financing - Many of the programs and proposals envisioned in the plan will require expenditure of public funds. Available funds can be judiciously allocated through utilization of a capital improvement programming process, as mandated by the State. Economies should result from the planning process in the form of better service, elimination of duplicated services, greater good for the largest number of persons, and the avoidance of future deterioration.

3. Citizen's Participation - The most significant achievement that the plan will attain is the gaining of public awareness and participation in the community's future growth. The acceptance and support of the plan by the citizens will eliminate many of the obstacles toward reaching the plan objectives.

ORGANIZATION OF THE PLAN

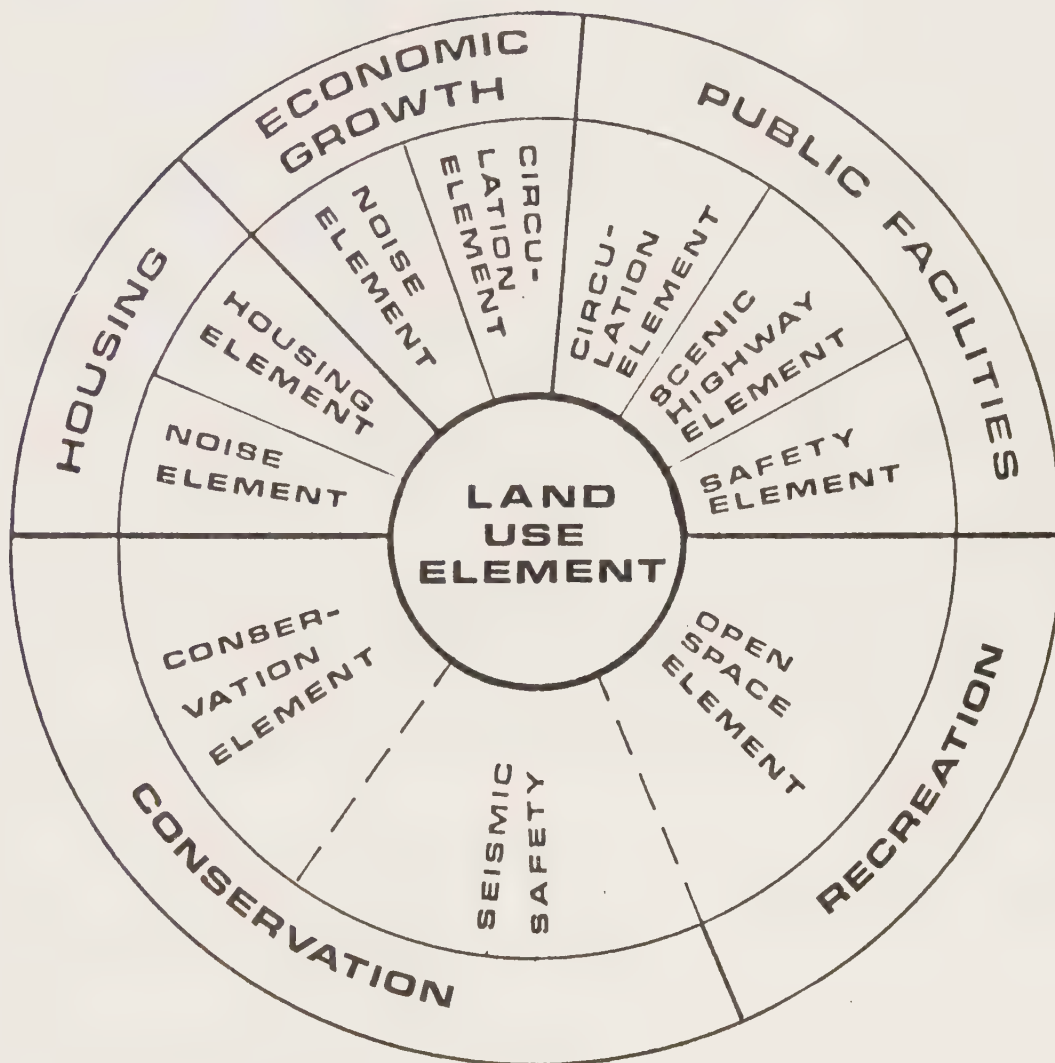
Because of the great overlap between the nine mandatory general plan elements (eg., the obvious relationship between open space and conservation; bearing of all elements on land use element), the General Plan Guidelines suggest various methods for consolidating the elements. For the Fortuna General Plan, the method diagrammed on the following page is utilized.

Appendices are also provided which include the background material that was used as a basis for developing the policies found in the text. Thus, portions of the Safety, Seismic Safety, and Noise Elements are formed by the maps in Appendix A and the public safety elements in Appendix C. In addition, the Appendix contains statistics on housing, population, schools, etc., that make up a part of the various other elements. The heart of the Land Use Element is the Land Use Map. The policies that determined that map, however, are located throughout the text of the plan.

Appendix D fulfills the state requirement for an Environmental Impact Report. The policies column (page D-3 through D-9) also provides a convenient summary of General Plan policies.

COMMUNITY GOALS

Fortuna's mild climate and pleasant surroundings have guided its development as a residential community and shopping center for southern Humboldt County. In view of the slow industrial growth anticipated in Humboldt County, the City need set aside only a small additional amount of industrially zoned land. Fortuna can best maintain its economic position



PLAN ORGANIZATION

FIGURE 1

by increasing its attractiveness as a place to live and shop. This will be a challenging opportunity for Fortuna, since its growth must be managed so that the advantages of living in Fortuna are preserved. The following community goals were developed with these factors in mind:

1. The City should have available several sites suitable for development by light industry.
2. The City should strive to preserve and enhance the status of its Business District as a shopping center of regional attraction.
3. The City should take steps to insure that a variety of housing types are made available in numbers and locations consistent with the City's quality of life goals.
4. The City should insure that public facilities are provided which will insure a safe and healthy environment for the citizens of Fortuna.
5. The City should insure that its development proceeds in an environmentally sensible manner that protects the foothill-valley character of its surroundings and protects the citizens from foreseeable natural hazards.
6. The City should provide recreational facilities to accommodate its increasing population.

ECONOMIC GROWTH SECTION

GOAL: THE CITY SHOULD HAVE AVAILABLE SEVERAL SITES SUITABLE FOR DEVELOPMENT BY LIGHT INDUSTRY

Based upon the results of past efforts by various entities to attract industry to sites within Humboldt County, it would be wasteful for Fortuna to increase its recruiting efforts in this direction. A number of sites exist within the Urban Growth area, however, that would be well suited for industrial development. On several sites, industrial development would be the most appropriate use, taking into consideration adjacent land use and site layout with respect to transportation facilities (see Land Use Map). These sites are either within the City limits, on land currently being considered for annexation, or land that could eventually be serviced by the City. If annexation proceedings are begun, these areas should be considered for industrial rezoning, and, if feasible, utility lines should be planned to allow efficient extension into the proposed industrial sites. In any case, the City should work with the County to maintain these areas as industrial reserves.

GOAL: THE CITY SHOULD STRIVE TO PRESERVE AND ENHANCE THE STATUS OF ITS BUSINESS DISTRICT A SHOPPING CENTER OF REGIONAL ATTRACTION

The maintenance and improvement of Fortuna's position as a regional shopping center represents an area where the City can take positive steps to continue its economic growth. All aspects of Fortuna's growth are to some extent subject to national and regional economic trends over which the City has no control, but energetic action to enhance Fortuna's attractiveness as a regional shopping center will help buffer Fortuna from the "ups and downs" that have traditionally beset Humboldt County. Recognizing that much could be done to improve the appearance and convenience of the downtown area, the Fortuna Chamber of Commerce formed a Downtown Development Committee in 1967 to study downtown needs and recommend a plan for "providing the citizens of the community with a strong, pleasing, well-functioning and diversified downtown." A copy of the Downtown Development Plan of this committee is included in the jacket of the General Plan. The General Plan policies identified below are in agreement with those of the Fortuna Downtown Development Plan, but take a more comprehensive look at the improvement of shopping facilities within the Fortuna Planning Area. This view includes policies that will insure continued compatibility between the downtown area, the commercial strip along Fortuna Boulevard, and the peripheral shopping facilities.

POLICIES:

1. COMMERCIAL AREAS IN FORTUNA SHOULD BE ACCESSIBLE WITH BOTH SPEED AND SAFETY

The economic health of the downtown area in particular depends on easy and safe access by customers. Existing patterns of traffic flow create congestion on Main Street, with attendant noise, safety, and air pollution problems. Unnecessary vehicular traffic should be reduced, possibly by introducing one-way flows for adjacent streets. Parking deficiencies have been identified in the downtown area, and these deficiencies can be expected to be aggravated by an expansion of retail space. New parking areas should be sought, but parking lot development should be phased to allow use studies to be conducted before excessive amounts of land are committed to parking. Safe and convenient pedestrian routes will encourage circulation of customers throughout the downtown area. Reduction of unnecessary traffic on Main Street will do much to accomplish this.

2. FORTUNA SHOULD STRIVE FOR USE-COMPATIBILITY WITHIN ITS COMMERCIAL AREA

This policy recognizes that strip development has occurred along Fortuna Boulevard south of the downtown area, and attempts to build on this feature. This development is generally not dense enough to encourage the extensive pedestrian circulation characteristic of the downtown area - thus, the City should encourage "single stop" uses in the strip area. Such uses could include automobile sales, restaurants, real estate offices, etc. The limited retail space available in the downtown area should be utilized by "customer intensive" enterprises - those that thrive on the customer circulation that is encouraged by safe and attractive pedestrian routes. Such uses include retail clothing stores, hardware stores, etc. It is not intended that the classification proposed here be mutually exclusive - some overlap in uses in the two areas already occurs. The patterns proposed will be useful, however, in insuring long-term economic health for both areas. Implementation of this policy can be accomplished by a zoning ordinance that outlines the types of commercial uses permitted in each area and specifies that residential zones surrounding the downtown area accommodate high-density housing. The changeover from R-1 zoning to more intensive zoning around the downtown area should occur gradually throughout the life of this plan, and should be timed so as to reduce the impact on property values of single family homeowners. Although it is not the intention of the City to prohibit further development of "shopper intensive" facilities outside the downtown area, the City will use the guidelines provided in this element to maintain a proper balance between zoning for the two types of commercial uses, so that duplication of commercial services already provided in the City will not harm both the existing and the proposed facilities. The City should also work with the County to insure that expansion of Planning Area shopping facilities beyond the "neighborhood services" level occurs only after it is shown that demand exists. Similarly, expansion of zoning for strip commercial development should occur only after it has been demonstrated that the increase in this type of retail space will not place an unwarranted financial demand on the City, that the development is compatible with the overall development plan of the City, and that existing facilities do not provide adequate space or shopper convenience. The Planning Commission will review each request for new commercial zoning and will determine whether it is premature based upon the above criteria and the degree to which undeveloped commercially zoned land already exists in the City.

3. THE PHYSICAL APPEARANCE OF THE FORTUNA COMMERCIAL AREA SHOULD BE IMPROVED

An attractive shopping atmosphere will attract potential customers, even when no specific purchase is intended. This is particularly important in the downtown area, where pedes-

trian circulation is so important. Physical appearance can be improved by street plantings, miniature parks and malls, and maintenance of attractive store fronts and signs. It is particularly important that parking capacity be increased in an aesthetically sensitive manner so that these areas will form an attractive buffer zone between commercial and other uses. In addition, for those commercial facilities covered by California Administrative Code's dB (A) CNEL contour noise provisions, appropriate noise insulation measures should be provided.

HOUSING SECTION

GOAL: THE CITY SHOULD TAKE STEPS TO INSURE THAT A VARIETY OF HOUSING TYPES ARE MADE AVAILABLE IN NUMBERS AND LOCATIONS CONSISTENT WITH THE CITY'S QUALITY OF LIFE GOALS

Natural and man-made factors have combined to make Fortuna an especially attractive residential community. The broad floodplain of the Eel River insures open spaces to the west, and the timber-producing capacity of the foothills to the east has slowed extension of the City in that direction. Rohner Park carries a portion of this natural setting almost to the heart of the City. The citizens of Fortuna wish to preserve this natural setting of their City, while allowing gradual expansion of the population to a point compatible with the "small town" atmosphere of the City. This plan does not attempt to determine a formal "holding capacity" for the City under these conditions. The Planning Commission has estimated that an ultimate population of 10,000--15,000 in the Urban Services Area might be the maximum population compatible with their quality of life goals. The Fortuna sewage treatment plant is designed to accommodate, with expansion, an ultimate capacity of 9,500. The combined population of Fortuna and Rohnerville-Campton Heights is currently about 8,000. A growth rate of 1.5% per year has been projected from figures given in Appendix B. At this rate, the capacity of the sewage treatment facility would be reached in about 1990. Additional annexations would hasten the date at which capacity is reached.

In terms of housing, there are currently 1,519 dwelling units within the City limits (See Appendix B). With a population of 4,500, there are an average of approximately 2.9 persons per dwelling unit. This figure is somewhat lower than that often obtained for similar communities, probably because of the high percentage of elderly persons living in Fortuna.

Applying an estimated average of 3 persons per dwelling unit, a net increase of about 23 new dwelling units should be provided within the current city limits each year to accommodate a 1.5% growth rate. At this time, it appears that no effort need be made to limit growth in Fortuna--sewage and water service have been planned to accommodate growth and most citizens would agree that the Urban Services area includes many sections that can be developed without detriment to the overall quality of life. Citizen attitudes on this question should be reassessed as updates of this General Plan are prepared. Recently, the City has taken a strong stance on the need to correct storm drainage problems, temporarily freezing development of some areas where residential growth was expected. This, in combination with a building moratorium imposed by the County in the Rohnerville--Campton Heights area, has virtually stopped development in the Planning Area at the time of preparation of the General Plan. Policies dealing with these issues are found in the Public Facilities section of the plan. The policies developed below are designed to address inter-related long-term housing issues: cost, appearance, location and type.

POLICIES:

1. THE CITY SHOULD ASSESS THE NEED FOR VARIOUS TYPES OF HOUSING WITHIN ITS PLANNING AREA

Development of an ongoing "demand inventory" would encourage developer investment in construction of those housing types for which there is the most need. The required data could be gathered by a standing committee receiving input from real estate agents, developers, and other community representatives. A standard form should be developed by the Planning Commission to expedite data collection, and the Planning Commission or City Staff could be responsible for publishing a periodic (eg., yearly) summation.

2. SUFFICIENT SPACE SHOULD BE ALLOTTED TO ACCOMMODATE RESIDENTIAL GROWTH OF A VARIETY OF TYPES

Implementation of this policy will require a periodic review of the zoning ordinance to insure that the data gathered in the demand inventory is taken into account. It is not intended that the zoning ordinance be required to exactly reflect the needs identified in the demand inventory--rather, it is hoped that the zoning review process will respond to long-term trends in housing needs, against a background of community character that should remain

relatively stable. Commercial zoning needs should also be assessed at this time, since excessive or poorly placed commercial zoning may have undesirable effects on housing quality and availability.

3. THE CITY SHOULD INSURE A HIGH LEVEL OF DESIGN QUALITY FOR HIGHER DENSITY HOUSING

Housing in Fortuna is now composed predominantly of single family units. Several factors suggest that a greater percentage of higher-density housing will have to be provided in future years. Current economic trends place the single-family dwelling out of reach of many families. Even if these trends change, maintenance of the open spaces surrounding the City will require that Fortuna's future growth be accommodated within a relatively limited area, again suggesting a continuing need for higher density housing.

Several modifications are here suggested in Fortuna's planning process that will reduce any adverse impact of these trends on the community character by insuring good quality higher-density housing. A project review process for higher-density housing should be incorporated into the zoning regulation. Design standards for higher density housing should be developed to guide this project review process. These standards should address topics such as minimum lot size, maximum lot coverage, minimum building size, height limitations, parking provisions, access and egress design, arrangement of open space so as to provide usable recreation areas, and screening from any adjacent incompatible views. Additionally, the standards should point out the provisions of the State Administrative Code for multiple units built within the 60 dB(A) CNEL contour line. A map showing this contour line is reproduced in Appendix A. Finally, experience in other cities suggests that cluster housing is a useful concept for reducing costs, increasing the density of development, and maintaining the open space character of the community. The City should utilize its demand inventory study to determine the marketability of cluster and/or condominium housing in this area. If it can be shown that these units are saleable, the City should modify its subdivision ordinance and improvement standards to accommodate this type of subdivision design.

PUBLIC FACILITIES SECTION

NOTE: The following discussion of public facilities makes reference to Map 1 in Appendix A, Fortuna Planning Areas. The map delineates a number of planning boundaries, which are defined as follows:

Urban Services Area: This area includes the city limits and the surrounding area that either currently has urban services or can be provided with them in the immediate future. This land is suitable for urbanization, although the density of development to be allowed will be determined by the City based on specific conditions of topography, access, hydrology, and other planning considerations.

Urban Growth Area: This boundary marks the interface between developable land and land not suitable for further urbanization. Although the City does not exert direct jurisdiction over this area, all of the area could eventually be provided with City services, and the City hereby states its interest in providing input into planning decisions for this area. It is clear from inspection of the map that not all of this area is suitable for urbanization; the area includes streambeds and localized steep topography. Also, different portions of the area may be suitable for different kinds of development - urban, suburban, industrial, etc. Planning decisions should be based on specific conditions at each location. Further intense development should not occur until services are provided, although sparse suburban development may be appropriate for some portions of the area in the absence of services.

Planning Area: This boundary further extends Fortuna's planning interests to those areas where improper land use could affect Fortuna's water quality, viewshed, or other critical interests. The City therefore wishes to review and comment upon any projects proposed in this area.

These boundaries are not intended to commit the City to any specific annexation. They are intended to guide the City in planning decisions until the lines can be more precisely defined through further studies and discussions with the other jurisdictions.

GOAL: THE CITY SHOULD PROVIDE PUBLIC FACILITIES THAT WILL INSURE A SAFE AND HEALTHY ENVIRONMENT FOR THE CITIZENS OF FORTUNA

Many aspects of community character are controlled by policies concerned with public facilities. Utility extension policies play a role in determining the direction and extent of community growth. Economies achieved through sound public facilities planning help maintain low tax rates and result in funds being available for better quality facilities. It is for this reason, and not merely State mandate, that Capital Improvements Programming will be a major cornerstone of Fortuna's policies. The following discussion surveys the adequacy of the existing public facilities in the Urban Services Area.

SCHOOLS - Because of recent drops in enrollment, the physical facilities of the school system are regarded as adequate for the foreseeable future. (See Appendix B).

TRANSPORTATION - The only traffic problem identified that will necessitate major changes in circulation patterns is the traffic congestion encountered on Main Street. Suggestions for improvement of this situation are found in the Commercial Growth Section; a suggested pattern for traffic flow is presented in the Fortuna Downtown Development Plan. Primary transportation facilities are also provided by Rohnerville Airport and the North Western Pacific Railroad.

SOLID WASTE - Solid waste is currently being disposed of in the Table Bluff area. Use of this land fill facility will be curtailed in 1977 due to State water quality regulations. Relocation of solid waste disposal is a regional problem, the resolution of which should minimize adverse impacts on participating cities. Fortuna should continue to participate in these efforts to develop an efficient and economical solution that will meet the City's needs.

WATER AND SEWER - As discussed in the Housing Section, water and sewer central facility capacities are regarded as adequate to accommodate expansion of the City into the entire Urban Services Area, taking into account population growth that will occur in the next 20 years. The expansion capacities of the sewage treatment plant may have to be utilized to accommodate a major annexation. Extension of these services into potential annexation areas will require large capital outlays, but the policy of the City has been to require that new annexations "pay their own way" with regard to these facilities.

LIBRARY - Library services provided by the City Library are thought to be adequate for the foreseeable future. The library has seating for 27 persons and has a collection of 6,700 books. The joint use program with the Humboldt County Library gives readers access to a collection of 150,000 books. Reading programs are available for pre-schoolers and grade schoolers.

RECREATION - The adequacy of recreational facilities in the community is dealt with in the Recreation Section.

The following policies deal primarily with the expansion of public facilities in the community. Also included are policies covering the Scenic Highways Element and the Safety Element, drawn primarily from the study element found in Appendix C.

POLICIES:

1. PATTERNS OF PUBLIC FACILITY IMPROVEMENT AND EXPANSION SHOULD ENCOURAGE ECONOMY AND EFFICIENCY

When it is in the City's interests, it should insist that new annexations receive water and sewer services simultaneously, unless physical conditions make it economically infeasible.

It is felt that disputes about road maintenance responsibility within the City limits can be reduced by establishing a set of rural road improvement standards. Suggested standards would prohibit development of lots within the City limits (or, the annexation of developed parcels to the City limits) unless such lots face on a "public way", which might be defined as a 20 foot all-weather road developed on an existing right of way that conforms to the City's improvement standards. After being brought up to City street standards, this public way could be accepted at the pleasure of the City.

In developed areas, the City should require City street standards, or at least the taxing basis to develop such standards, as a condition of annexation. Except for routine maintenance utilizing State funds, roads in such areas should not receive City attention until brought up to City standards.

2. THE CITY SHOULD EXPLORE THE NEED TO PROVIDE ADDITIONAL PUBLIC SERVICES AND FACILITIES

a. Bike Paths.

The expansion of "adult" bicycle activity seen in some other cities has lagged in Fortuna, primarily because of the distance separating Fortuna from other centers of employment. However, the City should review the great amount of information made available in recent years concerning bicycle safety and methods of reducing risk. Top priority in this study should be given to developing means to reduce the risk to children using the bicycle to ride to school. The study should assess the need for bicycle paths, survey City streets for correctable hazards to bicyclists, and review the Police Department's existing program of bicycle safety instruction.

b. Scenic Highways.

No sites are proposed for designated scenic highways within the Planning Area. The City will continue to use the existing Rohner Park Vista as a scenic overlook for the City.

c. Flood Control Fund.

As mentioned in the Housing Section, the current freeze on construction activity in the City of Fortuna is due primarily to drainage problems caused by tributaries that enter the Eel River via Fortuna. The City is working with the Flood Control District to alleviate this problem, but the solution will ultimately involve a long-term financial commitment. In order to fairly distribute this burden between the City and the developer whose projects will contribute to the problem, many cities have started flood control funds with various methods of assessment. In view of the severity of the drainage problem in Fortuna, it is recommended that the City consider establishing a flood control fund, utilizing and building upon data gathered by the Humboldt County Public Works Department.

3. THE CITY SHOULD INSURE THAT, WITHIN THE FINANCIAL LIMITATIONS OF THE COMMUNITY, ITS FACILITIES MINIMIZE PUBLIC RISK

A number of potential fire hazards within and around the City were identified by the Public Safety study element (see Appendix C). The City should work with the Fire District to assess the severity of these hazards and develop a priority list for correction, as funds are made available.

The Public Safety Study element also identifies a number of other hazards. The location of some of these hazards is identified; others will require inspection to determine their extent and location. It is therefore recommended that the City Department of Public Works prepare a check list based on the hazards identified in the Public Safety study element and that the Department conduct an inspection of the city to inventory all hazards. It is further recommended that the Department of Public Works prepare a priority listing of those items of City responsibility that need attention, and that funds for corrective measures be allocated according to this listing as they become available. For those hazards of a recurrent nature, it is recommended that the Public Works Department conduct an annual survey within the City to form the basis for an ongoing safety program. Additional implementation measures, as identified by the Public Safety study element, should be pursued by the City in regard to public safety hazards on private property.

CONSERVATION SECTION

GOAL: THE CITY SHOULD INSURE THAT ITS DEVELOPMENT PROCEEDS IN AN ENVIRONMENTALLY-SENSIBLE MANNER THAT PROTECTS THE FOOTHILL-VALLEY CHARACTER OF ITS SURROUNDINGS AND PROTECTS THE CITIZENS FROM FORESEEABLE NATURAL HAZARDS

Policies:

The previous Fortuna Conservation and Open Space Element, adopted by the City Council in December 1973, used an overlay technique to identify areas within the City limits where R-1 zoning with a minimum lot size of 10,000 square feet was recommended. These areas are delineated on the Open Space and Conservation Plan Map in Appendix A, with the recommendation that the next zoning ordinance review implement the minimum lot size provision.

Since the City has been growing recently by small annexations, it is necessary that this element address the open space aspects of these annexations. The City should attempt to determine the ultimate zoning for annexed parcels at the time

of review of the annexation application, so that capital improvements planning can anticipate new demands as soon as possible and the land owners will be aware of the development limitations to be placed upon their land. Both the Environmental Review Board and the Planning Commission can function in this process. The ERB should insure that the Planning Commission is supplied with adequate information concerning slopes, drainage, and other constraints that might influence zoning decisions.

The Public Safety Element adopted by the City Council in 1975 is included in this General Plan as a study element (see Appendix C). Its recommendations concerning seismic safety, slope stability, and flooding are restated below, and should be considered official policies of the Fortuna General Plan. The slope stability recommendations refer to the map reproduced in Appendix A.

Recommendation #1. The City building inspector should make available to prospective builders of masonry buildings a copy of seismic information in the Public Safety Element so they can decide for themselves whether extra design considerations are warranted.

Recommendation #2. The Fire District staff or building inspector should warn property owners to inspect flues and chimneys for damage after moderate and large earthquakes. Also, occupied structures which appear to have been seriously damaged by an earthquake should be inspected and evacuation required if they are found unsafe.

The slope stability map in Appendix A delineates the slope areas around the City that appear to have stability problems. The delineations are generalized and serve as a caution to those designing highways, subdivisions, or structures that further slope stability investigation is warranted.

The hilly areas in the northern portion of the planning area are characterized by steep slopes bordering narrow gullies and fairly extensive nearly flat areas of high stability. The steepest hillsides are classified as unstable; while the less steep slopes appear to be moderately stable, providing that their present state is not upset by poorly engineered construction or timber removal. A more extensive area of low stability is noted on hillsides near Palmer and Little Palmer Creeks.

Most of the present townsite and adjacent lowland area are categorized as stable due to the gradual slope. The area westerly of the railroad right of way, because it has been

an area of flood deposition, contains an undetermined potential for localized liquefaction, lurching, cracking, and differential subsidence. Location of large structures in this area should be preceded by borings beneath the site to assess the potential for these less common but dangerous occurrences.

Recommendation #3. Before any major excavation, or the construction of dwellings, public facilities, and large commercial or industrial buildings is permitted by the City within low stability areas, special studies by a registered soil engineer or licensed geologist should be undertaken by the developer and necessary provisions made for reducing landslide risk.

Recommendation #4. The City should continue to work with the Flood Control District to solve local drainage problems.

Recommendation #5. Where steep slopes are the only feasible location for access roads into hillside areas subject to considerable residential development, such roads should include drainage facilities adequate to handle potential runoff.

Additionally, the creek open space buffer strips identified on the Conservation-Open Space Plan Map (Appendix A) are to be maintained as Open Space and extended linearly as new live creek areas are annexed.

RECREATION SECTION

GOAL: THE CITY SHOULD PROVIDE RECREATIONAL FACILITIES TO ACCOMMODATE ITS INCREASING POPULATION AND AREA

Recreational opportunities abound in Fortuna, and the number and distribution of play areas is felt to be adequate. Rohner Park, the only community park in the City limits, is adequately sized to handle the expected population growth of the City. The Rohner Recreation District is currently pursuing a relocation of the area's organized field activities to another site, which would free Rohner Park's fields for more informal activities. The Recreation District is also considering an alternate plan to cooperate with Fortuna High School in the development of an indoor swimming pool, playing fields, and tennis courts on a site south of the High School. These sites are identified on the Conservation and Open Space Plan Map in Appendix A. The City should continue to support the Recreation District in this effort.

POLICIES:

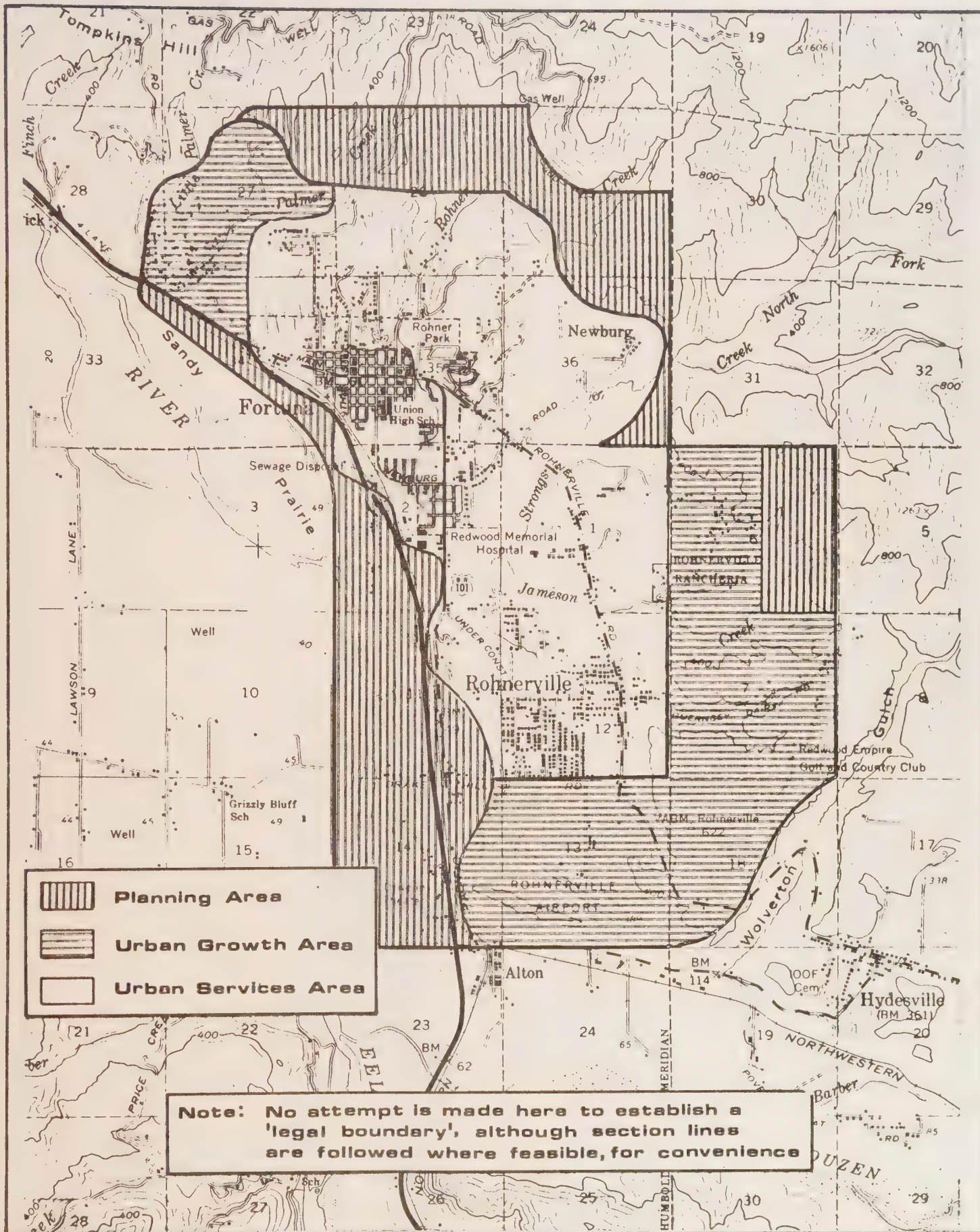
Implementation of the policies of the Housing Element of this General Plan may result in a greater proportion of higher-density housing surrounding the downtown area. The proposed design standards for multiple family housing should insure that adequate lawn space is provided for play areas.

These design standards should require large multiple family housing developments to provide a conveniently located, equipped play area for use by development residents. Open space dedications may be required from developers of subdivisions in single family zoning areas, especially for large subdivisions remote (over 1/2 mile) from a playground.

Although Rohner Park is large enough to handle the population increase from annexation of the entire Urban Services Area (according to recognized standards for population served:area ratio), portions of Rohnerville - Campton Heights are outside the 1.5 to 2 mile service area suggested for a park of this type. For this reason, the City should consider reservation of the land for an appropriately sited multi-purpose park in Rohnerville - Campton Heights before annexation is completed.

APPENDIX A

MAPS



FORTUNA PLANNING AREAS

☐ HIGH STABILITY: No rapid or destructive mass movement is anticipated even under intense shaking. However, alluvial deposits in and adjacent to the flood plain of the Eel River create potential for liquefaction and differential subsidence which are unknown with present formation.

☒ MODERATE SLOPE STABILITY: Moderate stability under existing conditions, but rapid mass movement is possible if existing stability upset by construction, timber removal or intense shaking.

☒ LOW SLOPE STABILITY: Generally unstable under existing conditions. Instability related to a combination of slope steepness and bedrock characteristics. Intensified mass movement can be expected if existing slopes are subjected to construction, timber removal, or moderate to intense seismic shaking.

NOTE: This map represents a generalized picture of slope stability conditions. The map is tentative and relies on evaluation of geological and geomorphic data, including analysis of aerial photographs. It should be refined as better data become available.



**FORTUNA
GENERAL PLAN**

SLOPE STABILITY

OSCAR LARSON & ASSOC.
1809 ALBEE ST
443-9381

EUREKA

APPROX SCALE 1" = 1500' PLATE NO. 2

-  CONGESTED TRAFFIC
-  UNSAFE INTERSECTION
-  PEDESTRIAN HAZARD
-  DAMAGED FOUNDATION / WALLS
-  HAZARDOUS DEBRIS
-  CL₂ STORAGE
-  FLOOD HAZARD
-  DRAINAGE PROBLEM
-  FLOOD PLAIN (FROM THE U.S. CORPS OF ENGINEERS 1964 FLOOD MAP)



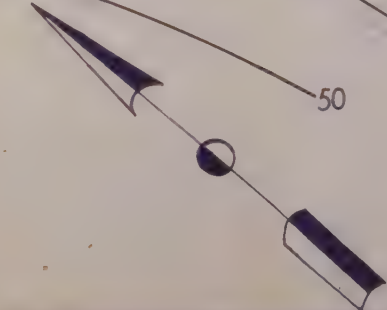
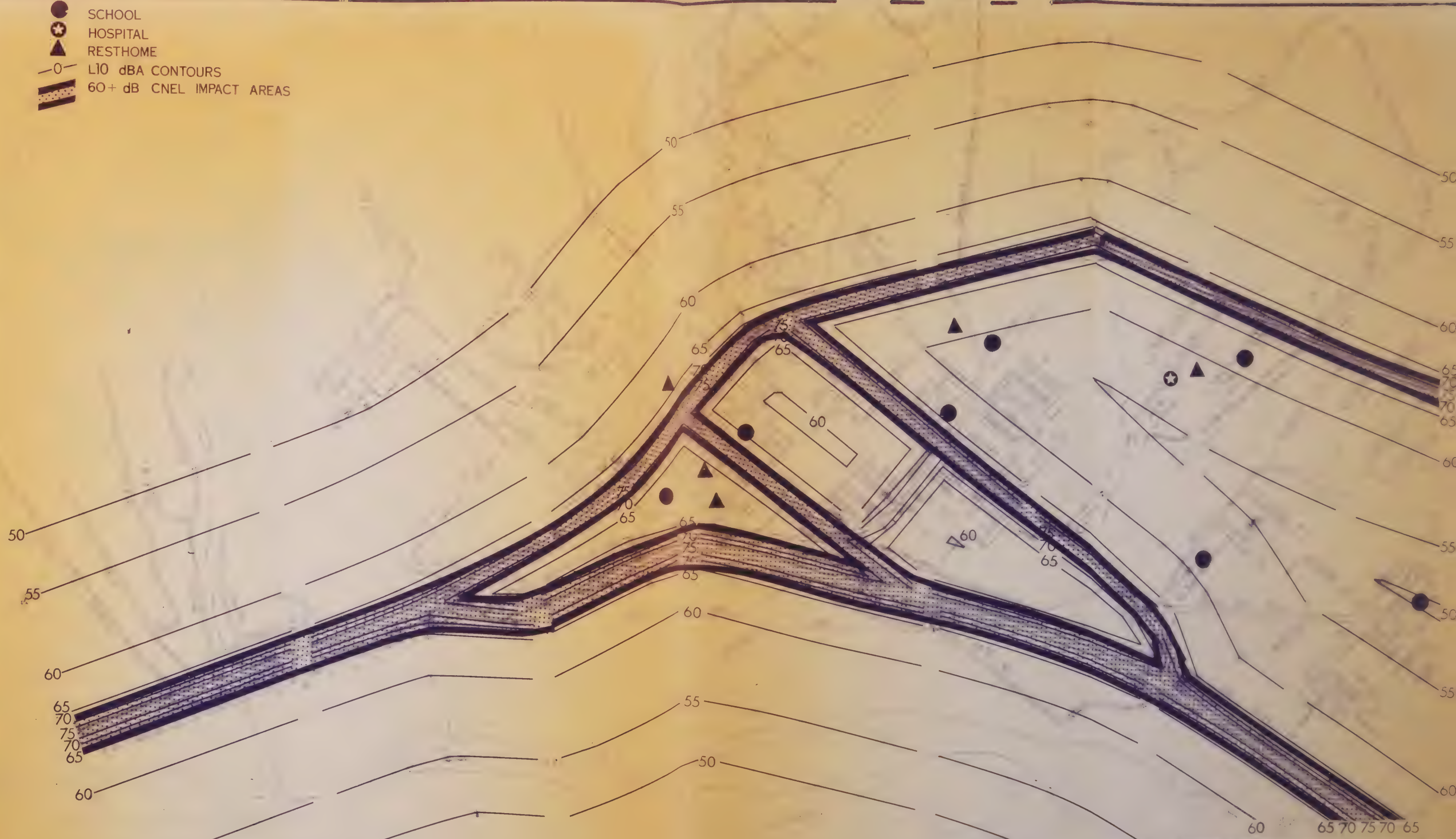
**FORTUNA
GENERAL PLAN**

SAFETY HAZARDS

OSCAR LARSON & ASSOC.
1809 ALBEE ST. EUREKA
443-8381

APPROX. SCALE: 1"=1500' PLATE NO. 3

- SCHOOL
- ★ HOSPITAL
- ▲ RESTHOME
- 0- L10 dBA CONTOURS
- ▨ 60+ dB CNEL IMPACT AREAS



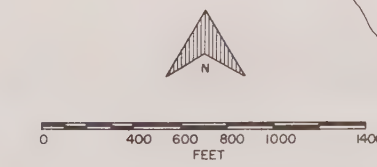
**FORTUNA
GENERAL PLAN
AMBIENT NOISE**

OSCAR LARSON & ASSO.
1809 ALBE^Y ST. EUREKA
443-8381

APPROX. SCALE: 1"=1500' PLATE NO. 4

APPROVED BY FORTUNA PLANNING COMMISSION
MAY 11, 1976 *Les Mann* CHAIRMAN
LES MANN
ADOPTED BY FORTUNA CITY COUNCIL
JULY 6, 1976 *Ray E. Stewart* MAYOR
RAY E. STEWART
ATTEST: *Jo Anne Boerger* CITY CLERK
JO ANNE BOERGER

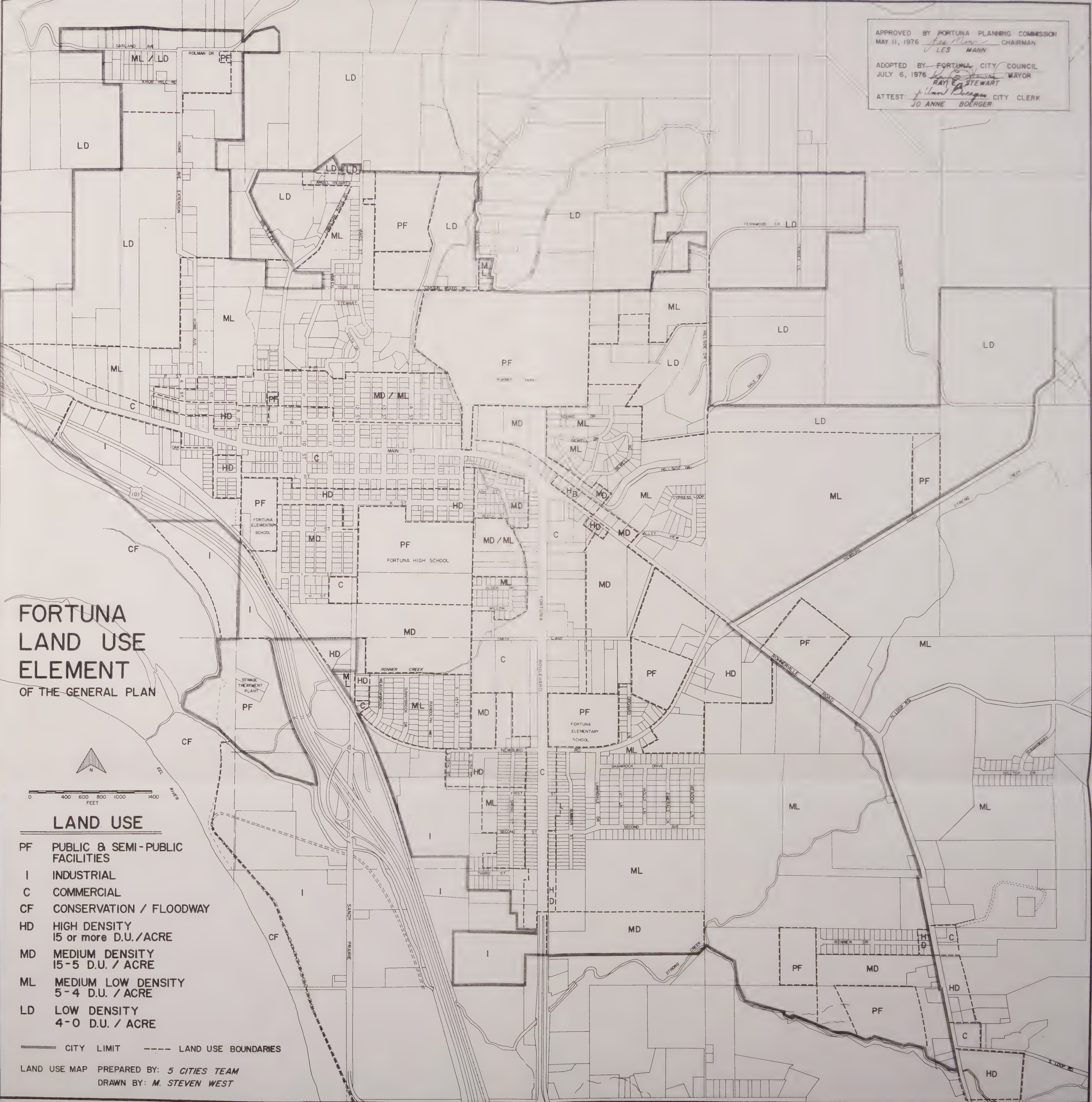
FORTUNA LAND USE ELEMENT OF THE GENERAL PLAN



- LAND USE**
- PF PUBLIC & SEMI-PUBLIC FACILITIES
 - I INDUSTRIAL
 - C COMMERCIAL
 - CF CONSERVATION / FLOODWAY
 - HD HIGH DENSITY
15 or more D.U. / ACRE
 - MD MEDIUM DENSITY
15-5 D.U. / ACRE
 - ML MEDIUM LOW DENSITY
5-4 D.U. / ACRE
 - LD LOW DENSITY
4-0 D.U. / ACRE

— CITY LIMIT --- LAND USE BOUNDARIES

LAND USE MAP PREPARED BY: 5 CITIES TEAM
DRAWN BY: M. STEVEN WEST



APPENDIX B

PUBLIC FACILITIES PLANNING DATA

FORTUNA GROWTH HISTORY
1940-1975

<u>Year</u>	<u>City Pop.</u>	<u>% of County Pop.</u>
1940	1413	3.1%
1950	1762	2.5
1960	3523	3.4
1970	4203	4.2
1975	4550*	4.4*

GROWTH RATES

<u>Period</u>	<u>Growth Per Annum</u>
1940-1960	2.0%
1960-1970	1.7**
1970-1975	1.6 (est)

* State Department of Finance estimates

** Bulk of growth due to annexations

DWELLING UNIT
SUMMARY

FORTUNA CITY LIMITS: MAY, 1975

<u>Definitions</u>	<u>Totals</u>
Single Family Houses)	
Mobile Homes not in Trailer Parks)	1234
Attached Single Family Apartments)	
Duplexes	126
 Cabins & Cottages at Courts & Motels	24
Mobile Homes at Trailer Parks	67
Triplexes	21
Fourplexes	32
Larger Apt. Houses	13
 City Limits Total:	1519

Source: Fortuna Public Works

SCHOOL SUMMARY - FORTUNA PLANNING AREA
ON-GROUNDS ATTENDANCE*

	Max. Capacity	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
<u>High School Level</u>									
Fortuna Union High School	1500	1268	1287	1295	1350 ₊	1287	1214	1168	1063
<u>Jr. High/Elem</u>									
Fortuna Adventist Junior Academy	200	150	150	137	"less"	N.A.	N.A.	N.A.	N.A.
Fortuna Elementary School	)								
South Fortuna Elementary School	) 1050	850	779	742	675 ₊	"full for next 3-4 yrs, slow rise thereafter"			
Rohner Elementary School	)								
Toddy Thomas Elementary School	) 750	585	578	515	500+	"bottom out at 500"			

*Source: Administrative personnel of respective schools.

APPENDIX C

PUBLIC SAFETY STUDY ELEMENT

OSCAR LARSON & ASSOC.
CONSULTING ENGINEERS
& LAND SURVEYORS

EUREKA , CALIF. 95501



PUBLIC SAFETY ELEMENT

Content. The Public Safety Element is a composite of the Seismic Safety Element and the Safety Element. According to the state guidelines the Seismic Element should consist of "an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to the effects of seismically induced waves such as tsunamis and seiches." The seismic safety element includes "an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards...".

Purpose. The Government Code identifies the purpose of the Safety Elements as "the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road width, clearances around structures, and geologic hazards mapping in areas of known geologic hazard." The intent of both of these elements is to reduce loss of life, injuries, damage to property and economic and social dislocation.

Hazards. When structures and land uses are situated close together and are utilized and occupied for a variety of purposes the number of possible hazards that could result in damage or destruction of property or injury to the occupants increases dramatically. Both the individual property owner and local government have become involved in various attempts at hazard reduction or the provision of emergency services. Public agencies have assumed responsibility for protection of private property in extreme hazards or where hazards affect many properties or citizens. At the same time the city is responsible for the use and maintenance of publicly owned property, such as streets, public buildings, and parks. Since it is difficult to totally remove all risks from the environment, property owners and the city protect themselves from economic loss by purchasing insurance policies. The greater the risk that is covered the higher the insurance premium. So it behooves both property owners and the city to reduce the risks whenever possible for both humanitarian and economic reasons.

The following series of goals characterizes the general intent of the city and the fire district:

1. To assist private property owners in maintaining safe living, working, and playing conditions by requiring inclusion of safety factors in new structures and land uses, by encouraging reduction of hazards on existing properties through proper maintenance, by maintaining adequate law enforcement and fire suppression capability, and by participating with property owners in various types of public works projects aimed at reducing hazards when general public benefit will result.
2. To make public facilities as safe as possible.

3. To achieve the lowest possible fire rating for the city.
4. To cooperate with other agencies to maximize emergency response capability.
5. To minimize the loss of life and property damage in the event of disaster by providing essential services and organizing efficient community response.

Giving substance to these goals requires more precise definition of how far the city should go to achieve these goals. Legal obligations, liability, available resources, and general community attitudes must all be considered. Lack of resources is almost always a critical factor. When the decision hinges on community interests the type of risk involved should be carefully identified.

Risk Assessment. Risks can be classified as avoidable, acceptable and unacceptable. Avoidable risks are those that can be corrected without increased expense, or are risks that people voluntarily assume as part of their work or recreation for its intrinsic stimulation. An acceptable risk is not taken out of choice, but the level of risk is judged minor and not worthy of the extra effort and expense needed to eliminate it. Unacceptable risks are those where the threat to property or persons is judged worthy of action on the part of the property owner or the appropriate public agency.

The intent of the Public Safety Element is to identify any instances where avoidable risks can be reduced by public agencies at little expense and to identify courses of action to reduce unacceptable risks. The recommendations presented herein address the avoidable risks that were uncovered and the unacceptable risks that the City Council feels can be reduced by the suggested actions. Those risks that are not addressed are either considered acceptable or it was determined that the existing response to the risk is all that can be justified of a public agency under the circumstances.

Format. The various aspects of public safety are considered under the following headings: Seismic Hazards, Flooding Hazards and Drainage Problems, Fire Hazards, Traffic and Pedestrian Hazards, and a section on Storage Hazards, Attractive Nuisances and Other Hazards. The last section contains the contingency planning considerations related to disaster preparedness. The italicized paragraphs together with the information provided in the appendix represents the environmental assessment required by the California Environmental Quality Act. Plate 3 shows the location of many of the safety hazards identified in the planning area.

SEISMIC HAZARDS

Earthquakes. The western portions of Humboldt County, and adjoining offshore areas, are regions of moderate to high seismicity. Plate 1 shows the location of major faults. Except for the Cape Mendocino area, no obvious patterns emerge tying earthquakes to particular faults or shear zones. The only known historical surface rupture associated with a fault in the area was in 1906 along the San Andreas Fault in southern Humboldt County, at Shelter Cove and Upper Mattole. The frequent earthquakes south and southwest of Ferndale are taken to indicate modern activity along the Cape Mendocino-False Cape shear zone.

MAJOR EARTHQUAKE FAULTS

FAULT OR FAULT ZONE

FAULT INFERRED -----?

PLATE NO. 1



Elsewhere in the area no faults can be demonstrated to be unequivocally active, but several should be viewed with considerable suspicion. Recognizing that the data is sparse the approach identified in the appendix has been used to estimate the maximum probable earthquake (the strongest earthquake likely to occur on a given major fault during any 100-year period). The magnitude of such an event is estimated at 8.0 (Richter Scale) on the southern segment of the San Andreas fault and 7.3 on the other three fault zones in the southern Humboldt County seismic area. The four faults in the northern Humboldt County seismic area are estimated at 6.4 for the maximum probable event.

From the estimates of magnitude it is possible to predict the maximum and repeatable strong bedrock acceleration that would be felt in the Fortuna planning area from any of the faults (see Table I in Appendix A). The maximum bedrock acceleration estimates range from .10 g to .70 g and the repeatable strong bedrock acceleration estimates range from .07 g to .46 g.¹ Higher intensities would be expected in areas underlain by river alluvium, unstable landslide terrain or fill. The higher figures are due to the proximity of the Yager-Little Salmon fault northeast of the planning area.

The repeatable strong ground acceleration estimate is the factor engineers include in their structural design considerations. A formula in the Building Code determines how much building weight should be considered in the foundation design, anchoring, and wall reinforcement. The minimum acceleration factor in the Building Code is .1. For a masonry building this means that the design must account for 1.13 times the building weight. If a .2 acceleration factor is substituted, the formula produces a design load of 1.26 times the weight of the building, and a .3 factor equals 1.4 times the weight of the building.

An increase in the design load requires more reinforcement, more foundation tie-downs and other additives that increase the cost of the structure. Although the degree of cost increase varies according to the shape of the structure, the number of stories, etc., it is estimated that the construction cost for a one story concrete block building would increase approximately 5% if the acceleration factor was increased from .1 to .2. Above .2 the cost increases more than 5% for each increment because of higher design cost and more materials required.

During the 1954 quake which registered 6.5 on the Richter Scale (near Arcata) the damage to buildings in the planning area was minor. If frame structures built since 1954 are equal in resiliency to those built before, and most people feel they are, the risk of injury and serious damage seems remote to local citizens. It has been found, however, that large and even moderate earthquakes loosen buildings and their capacity to withstand the next earthquake diminishes even though there is little external evidence of the damage. This is true of both frame and masonry structures. Because masonry structures are the most susceptible to earthquake damage, increased construction requirements could reduce damage to new masonry structures.

¹ %g is the instantaneous acceleration in any direction imparted to bedrock by the seismic shock wave. It is related numerically to the acceleration imparted to a freely falling object by the pull of gravity.

To account for the 100-year earthquake event the acceleration figure would have to be increased to .4 or .5 which would make the cost of masonry construction prohibitive. A .2 or .3 factor will reduce personal injury by lessening the likelihood of walls collapsing on building occupants. However, there could still be considerable structural damage.

Recommendation #1. The City building inspector should provide prospective builders of masonry buildings with a copy of the seismic information in the Public Safety Element so they can decide for themselves whether extra design considerations are warranted.

Recommendation #2. The Fire District staff or building inspector should warn property owners to inspect flues and chimneys for damage after moderate and large earthquakes. Also, occupied structures which appear to have been seriously damaged by an earthquake should be inspected and evacuation required if they are found unsafe.

Slope Instability. Mass movement of material on hillsides is a major accompaniment of moderate and strong earthquakes. This may be in the form of landslides, rock avalanches, mud and debris flows, or other types of slope failure. Steep natural or artificial slopes and high water content favor such failure.

Plate 2 delineates the slope areas in the Fortuna planning area which appear to have stability problems. The delineations are generalized and serve as a caution to those designing highways, subdivisions or structures that further slope stability investigation is warranted.

The hilly areas in the northern portion of the planning area are characterized by steep slopes bordering narrow gullies and fairly extensive nearly flat areas of high stability. The steepest hillsides are classified as unstable; while the less steep slopes appear to be moderately stable, providing that their present state is not upset by poorly engineered construction or timber removal. A more extensive area of low stability is noted on hillsides near Palmer and Little Palmer Creeks.

Most of the present townsite and adjacent lowland area are categorized as stable due to the gradual slope. The area westerly of the railroad right-of-way, because it has been an area of flood deposition, contains an undetermined potential for localized liquefaction, lurching, cracking, and differential subsidence. Location of large structures in this area should be preceded by borings beneath the site to assess the potential for these less common but dangerous occurrences. These types of ground failure are discussed in more detail in Appendix A.

Recommendation #3. Before any major excavation, or the construction of dwellings, public facilities, and large commercial or industrial buildings is permitted by the City within low stability areas special studies by a registered soil engineer or licensed geologist should be undertaken by

the developer and necessary provisions made for reducing landslide risk.^{1, 2}

FLOODING HAZARDS AND DRAINAGE PROBLEMS

Plate 3 illustrates the areas that are inundated in a 100-year flood. Dikes and freeway elevation contain the Eel River along most of its length through the planning area. Flooding affects the 12th Street interchange, and the area around the sewage treatment plant. Strongs Creek in the vicinity of Fortuna Boulevard overflows its banks during large storms.

The many small watersheds in the northern and eastern portions of the planning area drain into Rohner Creek and Strongs Creek. When these creeks are filled, local drainage in the flatter areas of Fortuna is slowed and local flooding results. The area along Rohnerville Road between Smith Lane and Newburg Road, and the area on the east side of Fortuna Boulevard south of the shopping center are notable examples. Runoff problems also occur along steep roads with inadequate side drainage such as Home Avenue and Newburg Road east of Rohnerville Road. Other flooding is primarily due to insufficient drainage facilities. Flooding on Rohner Creek and Strongs Creek is being studied by Flood Control Subzone 1 and a program is expected to be developed to lessen the flooding potential.

The only dam that could cause flooding problems due to overflow or failure is Scott dam at Pillsbury Lake in Lake County - several hundred miles upstream from Fortuna on the Eel River. Due to the distance, any flooding would be easily contained within the 100-year flood plain and the hazard is considered insignificant.

Recommendation #4. The City should continue to work with the Flood Control District to solve local drainage problems.

Recommendation #5. Where steep slopes are the only feasible location for access roads into hillside areas subject to considerable residential development such roads should include drainage facilities adequate to handle potential runoff.

FIRE HAZARDS

The planning area is served by a Fire District with stations in Fortuna, Campton Heights and Hydesville. The District has ten trucks manned by 60 volunteers. Each station acts as a backup for the others and is equipped with a standby generator. The Fortuna State Division of Forestry is a backup for the District and has heavy equipment available in emergencies.

¹ Some of the low stability areas are presently outside the city limits. The County is utilizing Chapter 70 of the Uniform Building Code dealing with grading, and enforcement of County Ordinance #596 (which requires developers to provide appropriate soil studies for slopes in excess of 15%) to reduce the potential for landslides in the County's portion of the Fortuna planning area.

² See Implementation Section for further explanation of how this policy can be implemented

Several outlying areas such as Garland Road, Hillside Drive and others do not have adequate fire hydrants and there are no fire hydrants available in the Palmer Creek area. Many of the roads providing access to outlying areas are narrow and several dead-end without adequate turn arounds. Where such roads are the only access into the area, access can be cut off by a landslide, flooding or brush fire. Housing in the Palmer Creek area is often immediately adjacent to large amounts of brush or grass. The major fire hazard in the city is the older wood frame buildings without adequate fire separation in the downtown area.

Recommendation #6. The City should encourage the Fire District to continue its policy of an annual inspection of the downtown commercial buildings to identify risks that can be eliminated by the property owners.

Recommendation #7. The City of Fortuna should ensure good fire protection by improving the water and hydrant system wherever necessary to eliminate dead-end mains, provide adequate valving, provide a minimum of 1,500 gallons per minute from any single hydrant at the maximum daily residential consumption rate, provide hydrants within 300 feet of any point, and provide adequate storage for the types of fire encountered.

Recommendation #8. Enforcement of the Building Code, the Housing Code and Title 19 of the California Administrative Code and the City Weed Abatement Ordinance should be given high priority to ensure adequate new construction and the correction of unsafe fire conditions. The Fire District should notify owners of land with excessive brush and grass near structures of the hazard and encourage provision of adequate fire breaks.

The cost of full compliance with present building codes discourages many owners of substandard structures from making needed repairs. Some of the current requirements might be given lower local priority in order to accomplish primary rehabilitation objectives.

Recommendation #9. The city should consider adopting a special code governing rehabilitation of older structures requiring only the most essential improvements for the health and safety of residents and nearby property.

Recommendation #10. In order to achieve the lowest possible fire rating the city should support the fire district in its efforts to maintain the highest possible levels of fire protection, including manpower recruitment and training, purchase and maintenance of fire fighting equipment, mutual aid agreements, adequate alarm systems and disaster communication equipment, and implementation of the fire hazard reduction and preparedness recommendations contained in the Public Safety Element.

Recommendation #11. Fire Hydrants should be installed in the Garland Avenue, Hillside Drive, Rohnerville Road and Penner Road areas of Fortuna. A Public Water District or annexation to Fortuna should be considered in the Palmer Creek area so that fire hydrants can be provided.

TRAFFIC AND PEDESTRIAN HAZARDS

Downtown Area. Most traffic related accidents have occurred on Main Street, many of them being rear end collisions. Traffic is very congested due to the volume of traffic, parallel parking, and insufficient off-street parking. Some catch basins along Main Street are at a much lower elevation than the street surface and represent a danger to drivers, pedestrians and bicyclists. Double parking was observed in several locations and periodic truck unloading near the intersection of 9th and Main Street causes blockage of Main Street. Vehicles attempting to enter or cross Main Street have visual obstructions from cars parked along the curbs on Main Street, particularly at Eighth, Ninth and Tenth Streets.

Other Areas in Fortuna. Inadequate crosswalks, signs, and walkways increase pedestrian danger near the high school and at the intersection of Newburg Road and Fortuna Boulevard. Warning devices at the 12th and 3rd Street crossings of the Northwestern Pacific Railroad are inadequate. Fortuna Boulevard and 12th Street lack sidewalks and bicycle lanes. Pedestrians have to walk in the travel lane or in the gutter. The intersection of Fortuna Boulevard and Second Street is a blind corner. Automobile and truck traffic in the Second Street and Spring Street areas use so much of the roadway that pedestrian and parking problems are created. Rohnerville Road has problems with residential automobile traffic backing out onto the road. Few walkways are available in the vicinity of Rohner Elementary School causing children to walk in the traveled way. In certain residential areas, power poles, fire hydrants and some signs extend into the parking lanes.

Outlying Areas. Narrow bridges are utilized for private driveway access across drainage ditches adjacent to the main road. If these are not properly constructed and maintained, they can become safety hazards. Many streets are inadequately surfaced, are narrow, and have edges that are broken or sunken, a condition which can affect the driver's control of a vehicle.

General traffic problems are drainage ditches adjacent to rural roadways traveled at high speeds, lack of center line markings, edge of road markings or reflective markers on heavily traveled streets, lack of adequate sight distances at intersections and driveways, a lack of sidewalk ramps for handicapped persons, and inadequate street lighting in some areas.

Recommendation #12. Where existing streets are narrow, on-street parking should be controlled so that emergency vehicles will be able to pass at all times.

Recommendation #13. Where existing dead-end streets are more than 300 feet in length and lack adequate turn around area, means of providing such an area should be explored by the city or county and the Fire District.

Recommendation #14. Where streets parallel drainage ditches, steep topography, or where street curves are difficult to see, reflective markers should be provided along the edge of the road. Roads in the Palmer Creek area in particular would benefit from such treatment.

Recommendation #15. Adequate sight distance should be provided at every intersection particularly in congested areas. Vegetation, fences, buildings, and on-street parking should not be allowed to block visibility. Visibility problems at Main Street intersections in the Downtown and at the intersection of Fortuna Boulevard and Second Street should be given priority attention.

Recommendation #16. Center line striping, warning signs and speed limit signs should be provided wherever necessary particularly on rural roads, in congested areas, and at railroad crossings. Specifically the roads in outlying areas lack center lines and better warning devices are needed at the 12th and 3rd Street railroad crossings.

Recommendation #17. Adequate sidewalks, walkways, and crosswalks should be provided in congested areas and near schools. Curbs at crosswalks should be designed for use by handicapped persons and bicyclists. Broken or hazardous sidewalks should be repaired or replaced. The existing ordinance that requires installation of sidewalks as part of new developments is an important tool that should be consistently employed. A four way traffic intersection light at the south Fortuna Boulevard and Newburg Road, sidewalks along 12th, Fortuna Boulevard and in the vicinity of schools are the priority needs covered by this recommendation.

Recommendation #18. On-street parking should be controlled to allow passage of emergency vehicles, access to fire hydrants, and minimum interruption of traffic. Enforcement of double parking restrictions, prohibition of on-street truck loading during heavy traffic periods, design of off-street parking so vehicles don't back into travel lanes, prohibition of parking within 15 feet of fire hydrants and requirement of off-street parking where older buildings have been given new uses are specific steps that can accomplish these objectives. (See Appendix C for suggested policy on off-street parking for existing buildings).

Recommendation #19. Public bridges and private bridges providing access across drainage ditches should be inspected periodically by the owner and repaired as needed. Load limits should be posted if necessary. Private bridges should be properly engineered to support fuel and delivery trucks and should be subject to Building Code requirements.

Recommendation #20. Storm drainage inlets within roadways should match the level of the pavement and be covered with a grate that is not a hazard to bicycles. Several very low catch basins that are hazards were identified.

Recommendation #21. The Fortuna Planning Commission should study the need for provision of bicycle routes in the city and if the need exists, a bicycle plan including proposals for designated routes should be prepared and implemented. Such a system would help to reduce conflicts with automobile traffic.

Recommendation #22. The city should request assistance from the Pacific Gas and Electric Company in studying street lighting needs and means of financing installation. Where street lights are economically feasible they contribute to pedestrian and traffic safety and reduce vandalism.

STORAGE HAZARDS, ATTRACTIVE NUISANCES AND OTHER HAZARDS

Storage Hazards. The Fortuna area has a mix of industry, and commercial uses which present some continual and some periodic hazards and attractive nuisances. Junk yards, old car bodies and other types of secondary scrap materials are found near the intersection of N Street and 12th Street, at the foot of Ninth Street and in areas south of Main Street in the downtown area. A gas pump without a protective bumper is located at the end of Seventh Street near the railroad tracks. Electrical wiring passes between the fuel storage tanks on North Main Street.

Attractive Nuisances. Unfenced areas of debris and equipment storage, several dilapidated barns and vacant buildings, and the steep banks along accessible streams in the area, particularly Rohner Creek as it passes through the park, are the most notable attractive nuisances encountered.

Other Hazards. Although the intent of the public safety element was not to focus on hazards located on private property that only affected the occupants, problems became evident that should be noted: Chimneys and flues which terminate too close to combustibles, wiring services which have open non-metallic sheath cables, and buildings with deteriorating foundations, substandard fire separations and fire resistive construction in downtown buildings which suggest the likelihood of serious wiring, chimney, venting and exiting hazards. Power poles in need of replacement, cracked hillside retaining walls and overhanging dead tree limbs and limbs extending into power lines were also noted.

Although many of the conditions described in the following recommendations were not found in the community, policy recommendations are included to preclude hazardous situations from developing in the future.

Recommendation #23. Before issuance of permits for new construction or establishment of new land uses, particularly where explosives and hazardous chemicals are involved, the city or county should refer the application to the Fire District to ensure that all fire safety concerns are satisfied.

Recommendation #24. Land uses which include storage and transfer of hazardous materials should include special provision for accidental spills which ensure that the hazard will be contained on the premises and not be injected into the air or nearby drainage facilities or affect important traffic corridors, or critical public facilities such as hospitals and schools, or residential areas. The fuel distributorships near the Fortuna Elementary School and on Newburg Road near Rohnerville Road are examples of the problems existing in this and the above recommendation.

Recommendation #25. Any outdoor storage of fuels, debris, junk, equipment, appliances and wrecked vehicles should be completely fenced to prevent unwarranted access. Warning signs should be provided at outdoor fuel storage locations, and quantities of gasoline should be stored underground. Vehicles carrying hazardous materials should not be permitted to park in residential areas.

Recommendation #26. An annual cleanup program should be instituted to encourage residents to remove debris, old appliances and other hazardous items.

Recommendation #27. Critical public services such as the water system, sewer system, fire and police protection are essential to risk reduction and adequate emergency response. They should be adequately staffed and equipped at all times. The water source and storage facility and the sewer treatment plant should be fenced to prohibit unwarranted access. The sewer system should be maintained to minimize the possibility of accidental discharges.

Recommendation #28. The city should work with local insurance agents, and fire district staff to develop a program which provides a free home safety inspection at the request of the homeowner. Such inspections could include review of wiring, emergency exits, foundation conditions, etc. and provide the homeowner with ideas on how needed changes could be made at minimum expense.

Recommendation #29. The Building Code provisions which authorize condemnation by the city of structures that are public hazards should be utilized when necessary to persuade hesitant owners to repair or demolish the structure.

Recommendation #30. Inspection of power poles should be included in the regular city street inspection program. The appropriate utility should be notified when hazardous conditions are found.

Recommendation #31. All signs projecting over public rights-of-way represent a potential public liability and should be inspected regularly to ensure public safety and proper spacing from utility lines. Any dangerous materials used in the sign, such as glass, should be replaced. Signs located within the sight lines of traffic lights should not include red or green lighting to avoid driver confusion.

Recommendation #32. The city should establish a program to remove tree limbs and other growth projecting over public rights-of-way that represent a hazard. When tree limbs conflict with power lines, the appropriate utility should be notified of the hazardous condition.

Recommendation #33. Erosion caused by roadside drainage should be corrected before costly repairs to street pavement or sidewalks are necessary.

Recommendation #34. City parks should be inspected and safety hazards be corrected. Monkey bars and asphalt playground surfaces are notorious accident hazards. The city should encourage the school district to take similar action for school playgrounds.

Recommendation #35. The city should continue its policy of requesting that its public liability insurance carrier conduct an annual inspection of all public buildings and facilities to uncover ways the city can reduce its liability and improve working conditions for city employees.

Recommendation #36. Retaining walls in hillside locations and adjacent to stream beds should be inspected periodically for structural integrity and repaired or replaced as necessary.

Recommendation #37. Fire hydrants and power poles should be located far enough back from the curb so that they will not be damaged by, or cause damage to, vehicles.

Recommendation #38. Where steep stream beds are accessible, hedges or fences should be provided to prevent children, bicyclists and pedestrians from falling in. The banks of Rohner Creek through Rohner Park is one area of concern.

DISASTER PREPAREDNESS

Most of the preceeding recommendations are directed at correcting, or being prepared for small scale hazardous situations. This section presents consideration of the steps that can be taken to cope with major emergencies such as a major earthquake, extensive flooding, or large scale threats to the public health and safety.

Emergency plans are prepared in response to the requirement of the California Emergency Services Act which provides that counties and cities must adopt emergency preparedness programs.

Recommendation #39. Highway 101 and Rohnerville Road should be considered the evacuation routes from the planning area. Main Street and Fortuna Boulevard are the primary evacuation routes within the planning area. These routes should be kept passable in major emergencies recognizing that the type and location of the disaster will determine which will be most needed. Consideration should be given to ways that evacuation could be accomplished in areas with single road access such as Palmer Creek if the road is blocked by a landslide.

Recommendation #40. The contingency plans listed below and in the following recommendations should be available in City Hall for reference and communication during disasters: (1) Humboldt County Flood Plan; (2) Water Quality Emergency Notification Plan; (3) Accidental Sewage Discharge Plan; and (4) the City of Fortuna Civil Defense Plan.

Recommendation #41. Either as part of an existing contingency plan or separately, plans should be developed to include earthquake emergency considerations such as an alternate water source, and housing for residents of homes rendered unsafe by an earthquake.

Recommendation #42. Fire hazards such as carelessness with electrical appliances and safety hazards in the home and in the community, can be reduced by providing information to the general public. Suggestions on what to do in a major earthquake or other major disasters can also be provided. Hazard reduction information is particularly effective when presented in the schools. Public Safety officials should continue to work with school administrators to insure that this important information is reaching the students. Frequent drills can be conducted at school to illustrate appropriate disaster response.

Implementation

The Public Safety Element includes 42 recommendations which call for some type of implementary action by one or more city departments or other agencies. Each recommendation identifies the responsible person or agency whenever possible. However, time and resources are limited and it is expected that each city department will need to establish a phased implementation program with the City Council providing guidance on priorities. To assist in evaluating the implications of each recommendation a list of pertinent recommendations with some comments on implementation strategy are provided below for each affected agency. Further discussion on implementation of Recommendation #3 regarding slope instability is also provided.

Building Inspector. Recommendations 1,2,3,4,6,8,9,10,23,24,25,28 and 29 will be of most direct concern to the City Building Inspector. Several of these recommendations call for a cooperative implementation effort between the inspector and Fire District personnel. Most are related to the need to inspect certain hazardous situations, and may require more field work than is currently necessary. Because these activities will involve inspecting private property, the inspector will need to understand the reason for his activity so he can explain the program to concerned property owners. Support from the City Council will be important. The policies contained in these recommendations can also be incorporated in the building permit review procedure to ensure that new construction conforms to the adopted safety standards.

Public Works Department. Recommendations 3,4,5,7,10,11,12,13,14,15,16,17, 18,20,24,26,27,30,31,32,33,34,36,37,38, 39 and 40 touch some phase of the Public Works Department's responsibilities. In several instances the staff will be assisting the Planning Commission and the City Council in eliminating hazards during the design phase of private development. Other actions, particularly in the area of street maintenance and maintenance of the water and sewer system, may already be incorporated in standard operating procedure and a periodic review of the recommendations to ensure their continued application may be all that is required. Several other recommendations will require specific study of problems by the staff, and possibly the city engineer, with specific implementation recommendations being submitted to the City Council for authorization. Some of the proposals will no doubt involve minor to major construction projects with commitments of city funds and possible financial involvement by affected property owners. These projects can only be accomplished if the staff and the City Council carefully establish priorities and budget the necessary funds. Funding assistance from state and federal agencies may well be available and should be pursued, to supplement the city's limited financial resources.

Planning Commission. The policies expressed or problems identified in Recommendations 3,5,9,15,17,18,21,23,24 and 25 relate to land use issues which are considered by the Planning Commission. Periodic review of these problem areas and the suggested means of correcting them should enable the Commission to detect potential hazards during the permit review process. If they can be eliminated at this point the risks incurred by the city and affected property owners in the future will be lessened.

The Public Safety Element, as a whole, is of particular interest because the Commission is responsible for the General Plan and should review it periodically to see if it still addresses pertinent problems and serves the community's interests. In the course of its review, the Commission can determine from city staff and other agencies what recommendations in this element have been implemented, and which have not and why. If new problems are uncovered they can be added, and unimplemented recommendations can be revised.

Fire District. Many of the recommendations in the Public Safety Element are of direct concern to the Fire District (see Recommendations 2,6,7,8,9,10, 13,18,19,23,25,26,27,28,29,31,39,40,41,42). The first group of recommendations relate to hazard identification and the provision of adequate fire fighting capacity. The last few recommendations are concerned about preparedness for major emergencies. Because of their training and public safety responsibility the Fire District budget is limited and the staff is all volunteer so it is important that the District develop a phased implementation program based on a prioritization of the various recommendations. Although not as exciting as fire fighting, fire prevention activity and disaster preparedness can reduce the frequency of major fires and make fire protection less expensive in the long run. Maintaining good community relations and dynamic volunteer interest in the district is essential to the accomplishment of these objectives.

Police Department. The traffic safety and emergency preparedness recommendations will be of direct concern to the Police Department (see Recommendations 12,15,16,17,18,39,40,41 and 42). The Department can be of particular assistance to the street maintenance staff by identifying locations where improvements such as centerline striping, edge markers, repair of dangerous surface conditions, etc. could reduce driving hazards. The police staff will also need to be informed about the activities of the fire district and other public safety agencies to ensure coordinated response in time of emergency.

School District. The School District will be involved in the implementation of Recommendations 36 and 42 in particular, although other recommendations in the report may be helpful to the District in suggesting ways that hazards can be reduced on the school premises. Both the Public Safety and Noise Elements place great emphasis on the role of education in the effort to reduce hazards. The school system is well suited, with the assistance of public safety personnel, to present this information in a convincing and interesting manner.

City Council. By its adoption of the Public Safety Element, the Council is indicating to its staff and affected agencies what City policy is, and what it hopes to do in the way of hazard reduction and emergency preparedness. General Plan elements are intended to provide general direction, so implementation will necessarily involve further study, consideration of staff input, decisions on priorities, implementation strategy, funding, and efforts at coordination with other involved entities. Without the continuing support and interest of the City Council, implementation efforts will lag and the full benefits to the City and the public will not be achieved. An early decision on priorities and specific instructions to affected staff will demonstrate the

Council's interest in implementing the Plan. Many of the recommendations suggest incorporation of new policies and procedures into existing staff activities and should not require additional staff. A few recommendations will necessarily involve shifting staff away from less important matters for a time, and may also require diversion of some funds. The temptation to give preventive actions a lower priority and to concentrate on other more immediate problems should be resisted.

Humboldt County. As noted in the introduction, Humboldt County will consider these recommendations during the development of the County Public Safety Element. It is expected that they will cooperate with the City of Rio Dell in the implementation of policies and programs near the boundary of the planning area. Maintenance of good communication between city and county staff is essential to the implementation of a coordinated program.

Public Utilities. Recommendations 22,27,30 and 32 affect local public utility companies. The Pacific Telephone Company and Pacific Gas and Electric Company are most directly affected. The problems cited in these recommendations are often detected in the course of regular utility inspection programs. However, when special problems occur the City Public Works staff can assist by notifying the appropriate utility of the hazard.

Slope Instability

Recommendation #3 calls for the requirement of soils investigation in areas with low stability characteristics as indicated on Plate 2. The following is an elaboration of how the high, moderate and low stability area designations should be interpreted and what types of specific implementation steps can be taken.

High Stability Areas.

1. High stability areas are those expected to exhibit no rapid or destructive mass soil movement. The City may not normally require further slope stability determinations except where isolated steep slopes occur, where unique structures are anticipated or where other than residential type improvements are required. No testing and no evaluations were made on differential settling, subsidence due to underground conditions or liquefaction potential. The City may want to consider requiring soils tests where these conditions are expected to exist. Other information the City may require on a soils test is identification of areas to be filled, expansive soils, determination of cut or fill slopes, localized ditches or swales. As intensity of development increases, changes to ground cover, runoff, water courses and other existing ground features may be altered sufficiently to change the soils characteristics of a given parcel. The City could then consider soils report requirements in view of these changes.

Moderate Stability Areas.

2. Moderate slope stability areas are those felt to be generally stable under existing conditions. Mass movement is possible, especially if existing stability is upset by construction, timber removal or intense shaking. Intense shaking is not necessarily a function of seismic magnitude and can be expressed as a greater acceleration or shaking duration than those identified in Table I, Page A-9 of this report.

It is recommended that the City staff conduct a preliminary site investigation to determine if a slope stability report, prepared by a licensed geologist or soils engineer, should be required of the developer. The site investigation will also enable the staff to determine if other soil conditions need to be investigated and a full soils report may be necessary. It is suggested that slope stability reports be required where the area to be developed contains slopes in excess of 15% and a full soils report be required where heavy runoff occurs, or where springs, bogs or seepage areas exist.

Low Stability Areas.

3. Areas identified as low stability areas are deemed to be generally unstable under existing conditions. The instability is related to a combination of slope steepness and bed rock characteristics. Intensified mass movement can be expected if existing slopes are subjected to construction, timber removal, or moderate to intense seismic shaking. A slope stability report prepared by a licensed geologist or soils engineer should be required of the developer for development within these areas, especially if the structures will be occupied by people.

APPENDIX D

ENVIRONMENTAL IMPACT REPORT

FORTUNA GENERAL PLAN - ENVIRONMENTAL IMPACT REPORT

Environmental Setting:

Fortuna is the largest city in southern Humboldt County, and offers a range of commercial services that attracts shoppers from a wide radius. The major industries in the City are concerned with processing timber and river gravel, but most citizens are employed in the Eureka area, 18 miles to the north. The California Division of Forestry Regional Headquarters, located in Fortuna, is also a major employer.

The City is located mostly on flat or gently sloping land. Some steeper slopes occur in and adjacent to the northern portion of the City (Palmer Creek area). Urban expansion is limited by the foothills of the Coast Range to the east and the floodplain of the Eel River to the west. A prominent bluff just north of Highway 36 forms a natural boundary for the planning area to the south (See Appendix A, Map 1).

Operating farms are still found within the proposed Urban Services Area (including Rohnerville-Campton Heights to the south of the City), but the most productive farmland lies west of the City. Land to the north and east of the City is still productive timberland.

Within the City Limits, land use is mostly residential. Single family dwellings are most numerous, but construction of duplexes and apartment units has increased in recent years. Although isolated instances of dilapidation are evident, the City has no sections that can be considered blighted. Flooding of tributaries to the Eel River has been a persistent problem within the City, but a program of correction has been initiated in cooperation with Humboldt County.

Few significant wildlife habitat areas exist within the City. A notable exception is Rohner Park, with its large tract of second growth redwood. Recent annexations in the northern portion of the City have brought into the City relatively undeveloped tracts of land.

Additional discussions of the cultural and natural resources of the City will be found at the beginning of each of the major sections of the General Plan.

Project Description:

The project consists of the preparation of State-mandated General Plan elements for the City of Fortuna. The General Plan addresses all of the elements required by

the State, but for convenience is divided into five sections: Economic Growth, Housing, Public Facilities, Conservation, and Recreation. The Conservation Section is an update of an element prepared in 1973, including information on seismic safety, slope stability, and flooding from a Public Safety Element adopted by the City in 1975. The new plan thus brings all of Fortuna's general planning effort into a single document of consistent format.

The planning areas considered in this plan are shown in Appendix A, Map 1. The relationship of these boundaries to the planning process is explained on page 10 of the Plan text.

Two major planning efforts are progressing independently of the General Plan. The activities of the Humboldt County Flood Control District have already been cited. The other major planning activity is the study of the possible annexation of the Rohnerville-Campton Heights area. The plan does not address the advisability of the annexation, but many of the policies of the plan affect the issue.

Policies Summary

Economic Growth Section:

Have available several sites suitable for development by light industry.

Reduce traffic in downtown areas.

Increased parking lot development around downtown area.

Safe and convenient pedestrian routes should be developed.

Zoning ordinance to reinforce development of "highway commercial" businesses on Fortuna Boulevard and "shopper intensive businesses" in

Environmental Impact of The Proposed Action Unavoidable Adverse Impacts Mitigation Measures

All sites under consideration are currently vacant; site development of any kind will thus have some impact on natural habitat. On the other hand, all sites under consideration for industrial use are in areas where existing land use in adjacent areas reduces suitability of the sites as natural habitat. Sociological impact on surrounding areas should be minimal, because of compatibility of adjacent land uses.

Implementation should reduce noise, air pollution, and safety hazards in downtown area. Economic impact difficult to predict, but policy is intended to increase pedestrian access to all businesses.

Policy will reduce traffic congestion. Phased development is recommended to avoid over-development.

Positive safety and economic impacts will result.

Policy will avoid the negative impact that is often observed when "shopper intensive" businesses multiply outside of the downtown area at a rate

Policies Summary

downtown area.

Limit expansion of neighborhood shopping facilities and strip development to a rate justified by demand.

Each update of zoning ordinance should look closely at R-1 zones surrounding downtown area and consider gradual conversion to higher density residential zoning.

Increase attractiveness of downtown area.

Environmental Impact of The Proposed Action Unavoidable Adverse Impacts Mitigation Measures

faster than demand would justify.

Policy will result in positive economic impact through efficient use of available land.

There is a potential for negative impacts from this policy on the property values of some owners in R-1 zones. Mitigating measures include:

1. Emphasis on gradual conversion, with priority for conversion of R-1 areas with significant dilapidation problems.
2. Strict adherence to the recommendations contained in this General Plan that are designed to increase the quality of higher density housing.

Net economic impact of this policy on City should be positive, as high quality higher-density housing replaces lower quality single family residences. Policy may have some positive sociological impacts by making housing available near the City for individuals who do not own automobiles.

Positive visual and noise reduction impacts will occur. A positive economic impact

Policies Summary

Street plantings
Miniature parks and malls
Attractive store fronts
Adhere to California
Administrative Code
dB(A) CNEL noise
contour provisions

Housing Section:

Develop "demand inventory"

Project Review process for
higher density housing.

Design standards for
higher density housing.

Environmental Impact of
The Proposed Action
Unavoidable Adverse Impacts
Mitigation Measures

will result if increased
shopper circulation is
encouraged.

Successful implementation
should result in positive
economic impacts for the
developer and the City,
since developed land will
sell (and be appraised)
more quickly. Positive
sociological impacts will
result if a closer match
between demand and develop-
ment can be obtained. Should
this policy result in a
shift toward higher density
housing, single-family
residence owners in some
areas may object. This
negative sociological
impact is mitigated by the
language of the policy
statement, which emphasizes
that any such changes should
be gradual.

By insuring high quality
higher-density housing,
these policies will have
positive sociological and
economic impacts upon the
City. Although the policy
may slightly increase the
cost of housing, the overall
sociological impact of the
policy is felt to be positive.

Policies Summary

Make provisions in City subdivision ordinance and design standards for cluster housing and condominiums, if demand for these units can be demonstrated.

Public Facilities Section:

When it is in the City's interests, it should insist that new annexations receive water and sewer services simultaneously, unless physical conditions make it economically infeasible.

Require 20 foot all-weather road on approved right of way before development of lots in City Limits or annexation of developed lots to City Limits.

Require City Street Standards in developed areas.

The City should conduct or sponsor a bicycle safety study.

Environmental Impact of The Proposed Action Unavoidable Adverse Impacts Mitigation Measures

Positive impacts include increase in possibility of home ownership for middle income families and option for innovative approaches to land utilization on tracts with varying topography or other conditions. Open space character of development shifts from "family open space" to "community open space," which is regarded by some as a positive impact and by others as a negative impact.

These three policies give the City tools to ensure that new annexations are provided with the services that are necessary for public safety and welfare. Their impact must thus be considered positive, although they may increase the financial burden to citizens living in prospective annexations.

This study should result in positive impacts on safety in the community. Should the study result in the designation of bicycle paths in the City, it may result in an increase in the use of the bicycle for short trips, with accompanying fuel savings.

Policies Summary

The City should consider establishing a flood control fund.

The City should work with the Fire District to assess the severity of fire hazards identified in the Public Safety Study Element, and develop a priority list for correction.

City Department of Public Works should prepare a check list of hazards, a priority list for correction, and institute an annual survey of recurrent hazards, based upon the Public Safety Study Element.

Conservation Section:

Implement R-1, 10,000 square foot minimum zoning as outlined on Open Space and Conservation Plan Map.

The City should prezone new annexations, using information supplied through the environmental review process.

Environmental Impact of The Proposed Action Unavoidable Adverse Impacts Mitigation Measures

Should the City's study indicate that a flood control fund would be desirable, this policy will result in positive economic impacts on the City, since the cost of flood control will be fairly distributed between the City and the developer whose projects contribute to the problem.

Although these policies will commit additional City time and money, their net impact must be considered positive since the measures are necessary to insure public welfare and safety.

Areas were determined by an overlay method to be unsuitable for dense development. Negative impacts involving slopes and hydrology will be avoided by this policy.

This policy, along with previous policies concerning annexations, will have positive impacts upon the planning process in the City. Owners will be aware of the development limitations to

Policies Summary

See Previous Page.

Seismic safety, slope stability, and flooding policies:

1. Make available seismic information to prospective builders of masonry structures.
2. Warn owners to inspect flues and chimneys after earthquakes; Inspect seriously damaged structures after earthquake.
3. Require studies prior to development on low stability areas.
4. Continue to work with Flood Control District.
5. Require adequate drainage facilities for hillside developments.

Environmental Impact of The Proposed Action Unavoidable Adverse Impacts Mitigation Measures

be placed upon their land, and the City can specify what improvements should be required based upon the zoning designation. The net effect of explicitly stating this policy will be better communication between the City and the citizens, a positive sociological impact. Although there may be some increase in the cost of developing land, this policy insures that the developer will bear such costs, rather than the City.

These policies are all designed to protect public health and welfare. Their net impact must be considered positive, despite the expenses they will generate in terms of City time and money and increased costs of development.

Policies Summary

Maintain as Open Space and linearly extend the creek Open Space buffer strips as new areas are annexed.

Recreation Section:

Include provision for adequate lawn play areas in design standards for multiple family housing.

Require developers of large multiple family housing developments to provide a conveniently located, equipped play area for use by development residents.

Consider reservation of land for a multi-purpose park in Rohnerville, if annexation effort continues.

Environmental Impact of The Proposed Action Unavoidable Adverse Impacts Mitigation Measures

Positive impact on wildlife habitat will result. Long-term positive economic impact will result from reducing property damage losses during floods.

These policies are all designed to insure the availability of adequate recreational facilities to all Fortuna residents. Although they may slightly increase the cost of development, their long-term impact upon the character of the community and the health of its residents will be positive.

Alternatives to the Proposed Action:

Numerous alternatives can be conceived for each planning policy formulated in this General Plan. Each decision has been thoroughly discussed by the Fortuna Planning Commission, to arrive at a policy that accomplishes the desired planning goal, yet interferes as little as possible with citizen activities. Generally, alternative policies have been discarded because they were too expensive, too restrictive, or unlikely to produce long-term benefits for the City.

The Relationship Between Local Short-Term Use of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity:

Each policy proposed in the General Plan is aimed at enhancing the long-term quality of Fortuna's environment, considering physical, natural, economical, and sociological aspects. Implementation of the plan will result in the conversion of very little natural habitat to intensive use. Although the Plan proposes an "ultimate urban growth area" that suggests eventual increased urbanization in the southeastern portion of the planning area, the plan also stresses that the City wishes to closely scrutinize any development proposed in this area. The plan focuses on more intensive development of areas that are already urbanized, rather than the immediate opening of new areas for urbanization. The Conservation Section of the plan proposes minimum lot sizes in areas where intense development would not be compatible with existing environmental conditions.

Any Irreversible Environmental Changes Which Would Be Involved in the Proposed Action Should It be Implemented:

The policies proposed in this General Plan will gradually change the character of the City of Fortuna. The preparers of the plan believe that the proposed changes will benefit the citizens, compared with the changes that would take place without planning.

The following list summarizes the changes that can be expected to result from implementation of plan policies:

1. Gradual development of a more pleasant downtown area, with reduced air pollution, noise, and traffic hazards.
2. Gradual increase in amount of higher-density housing surrounding the downtown area.
3. Improvement in the quality of higher-density housing, with possible introduction of cluster housing or condominiums.

4. Reduction of safety hazards.
5. Reduction in the rate of unplanned, "rural" annexation to the City.
6. Increase in outdoor recreation opportunities, especially for residents in future higher-density housing developments.

The Growth-Inducing Impact of the Proposed Action:

The Plan makes no attempt to limit growth of the City. The Plan is based upon the assumption that population increase will be regulated by the economic factors that have operated in the past, and that growth will continue to occur at a rate of about 1.5% per year. The Plan is growth-inducing in that its policies are aimed at providing housing and services for anticipated population growth, and the plan places no limitations on housing starts. This policy is reasonable, since existing sewage treatment facilities are capable of accommodating anticipated growth to 1990, utilizing expansion capacity. The Plan suggests that growth-accommodating policies be reassessed periodically, in case the rate of population growth becomes more rapid.

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